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OF
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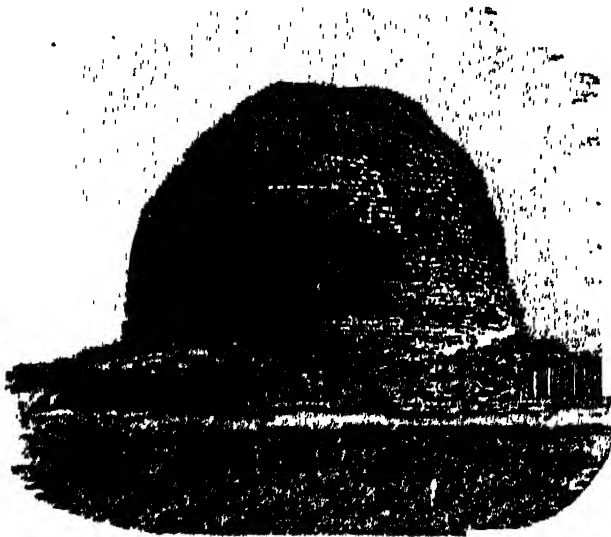
HISTORY

OF

INDIAN AND EASTERN ARCHITECTURE;

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Tupa at Manikyala.

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BOOK V.

CHALUKYAN STYLE

CHAPTER I.

INTRODUCTORY.

CONTENTS

Temple at Buchropully—Kirti Stambha at Worangul—Temples at Somnathpūr and Baillūr—The Kait Iswara at Hullabid—Temple at Hullabid.

OF the three styles into which Hindu architecture naturally divides itself, the Chalukyan is neither the least extensive nor the least beautiful, but it certainly is the least known. The very name of the people was hardly recognised by early writers on Indian subjects, and the first clear ideas regarding them were put forward, in 1826, in a paper by Sir Walter Elliot, in the fourth volume of the 'Journal of the Royal Asiatic Society.' To this he added another paper, in the twentieth volume of the 'Madras Journal:' and since then numerous inscriptions of this dynasty and of its allied families have been found, and translated by General Le Grand, Jacob and others, in the 'Bombay Journal,' and by Professor Dowson in the 'Journal of the Royal Asiatic Society' here.¹

From all this we gather that early in the sixth century of our era² this family rose into importance at Kalyan—in what is now the Nizam's territory—and spread eastward as far as the shores of the Bay of Bengal, in the neighbourhood of the mouths of the Kistnah and Godavery. They extended, in fact, from shore to shore, right across the peninsula, and occupied a considerable portion of the country now known as Mysore, and northward extended as far, at least, as Dowlatabad.

¹ Vol. i. (N.S.) p. 247, *et seqq.*

² Professor Eggeling tells me he has great reason for suspecting the date 411 for Palakesi I. ('Journal of the Royal Asiatic Society,' vol. iv. p. 8) to be a forgery. There is something certainly

wrong about it, but how the error arose is not yet clear. It seems at least a century too early. See the 'Journal of the Royal Asiatic Society,' vol. iv. p. 12; *ibid.*, vol. iv. (N.S.) p. 93.

Beyond this, they seem to have been closely allied with the Ballabhi dynasty of Gujerat, and afterwards to be the parent stems from which the Hoisala Bellalas of Dwarasamudra took their rise.

Their affiliations and descents are more easily traced than their origin. Jaya Singa, the founder of the Kalyan dynasty (A.D. 500 ?), claims to be of the Solar race of Rajputs, and descended from kings reigning in Ayodhya 1000 years (fifty-nine generations) before his time. This, however, seems as likely to be a reminiscence of the origin of their religion as of their race; for, though we are not yet in a position to prove it, it seems likely that the Chalukyas were originally Jains. At all events, it seems clear that the extension of the Jaina religion is nearly conterminous with that of Chalukyan sway, and the time at which the religion spread over India was also coincident with their rise and fall.

It would, of course, be too much to assert that the Chalukyas were either the revivors of the Jaina faith or even its principal propagators; but, during the early part of their history, this form of faith is inextricably mixed up with the more orthodox religions as practised by them, and prevails to the present day, in the countries where they ruled. The style of architecture which they invented when Jains was, it is true, practised afterwards by them both as Vaishnavas and Saivas; but it seems to have had its origin in the earlier form of faith.

Like all dynasties of Central and Northern India, the Chalukyas suffered eclipse in the dark ages that intervened between A.D. 750 and 950;¹ and the difficulty is to know whether we have any temples in their style before that period. Those at Aivulli and Purudkul described above (Woodcuts Nos. 121 and 189), belong to their age, and may have been erected by early kings of this race; but they do not belong to their style. Their sikras, or towers, either show the curvilinear outline of the northern style, or the storeyed pyramids of the Dravidians. It is as if this intrusive race adopted hesitatingly the styles of earlier inhabitants of the country, but that it was not till they had consolidated their power, and developed peculiar institutions of their own, that they expressed them in the style to which their name has been affixed.

It is more than probable that the materials exist for settling these and all other questions connected with this style; but, unfortunately, if it is so, they exist in the Nizam's territory, and that is *terra incognita* to us in so far as architecture is concerned. No one has yet passed through it who had any knowledge of the art, or was even aware that any interest attached to the forms or age of the buildings. It thus happens that, but for a few stray photographs, it

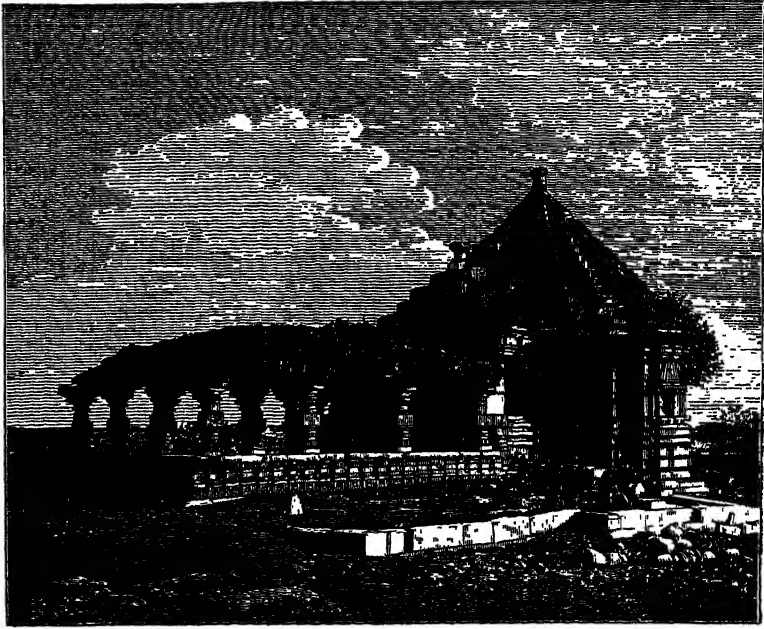
¹ 'Journal of the Royal Asiatic Society,' vol. iv. p. 10, *et seqq.*

must have been passed over as a style less known, from an artistic point of view, than that of almost any civilized country in the world. The rulers of the Hyderabad territory being bigoted Mahomedans, it is to be feared that great destruction of native temples may have taken place; but the real cause of our ignorance on the subject is the indifference and apathy to such matters in those who rule the rulers, and who, if they chose, could clear up the whole mystery in a few months or years, and with little expense to themselves, beyond expressing a wish that it should be done.

It may be, however, that the remains have perished. The line of Mahomedan capitals—Bijapur, Kalburgah, Bidar, and Hyderabad—which have long occupied the native country of the Chalukyas, is painfully suggestive of the destruction of Hindu temples; but still the wealth of remains that exists in Dharwar on the south and west, and the Berars on the north of the Nizam's territories, is so great that all certainly cannot have perished, and many will probably be found to solve the historical enigmas, though they may not be sufficient to restore the style in its integrity.

Whether Kalyani itself has escaped is by no means clear. In a list of remains in the Bombay Presidency, prepared by Mr. Burgess, dated 1873, there are the following entries:—"Three miles to the south-east of town, some fine temples and other ruins;" and further on, on the authority of the late Bhan Daji, it is stated, "has extensive ruins for miles around. There are caves in the hills, called Hazar Khotri, or Thousand Chambers. Pir Padshah Musjid is probably part of a Hindu temple." If this is so, the history of the style is probably all there, and only awaits the advent of some one capable of reading it.

The simplest and most typical example of the style that I know, and the one, consequently, which will serve best to explain its peculiarities, is at a place called Buchropully, not far from Hyderabad. It probably is also one of the oldest, and may even date before the cataclysm; but this is only a guess. I have no such real knowledge of the early form of the style as would enable me to feel sure on such a subject. As will be observed, the temple itself is polygonal, or star-shaped, of twenty-four sides (Woodcut No. 216). These, however, are not obtained, as in the northern style, by increments added flatly to a square, as will be explained hereafter, but are points touching a circle, in this instance apparently right angles, but afterwards were either more acute or flatter than a right angle. There are four principal faces, however, larger than the others: three occupied by niches, the fourth by the entrance. The roof is in steps, and with a flat band on each face in continuation of the larger face below. The summit ornament is a flower or vase, in this instance apparently incomplete. The porch is simple, consisting only of sixteen pillars,



216.

Temple at Buchropully. (From a Photograph.)

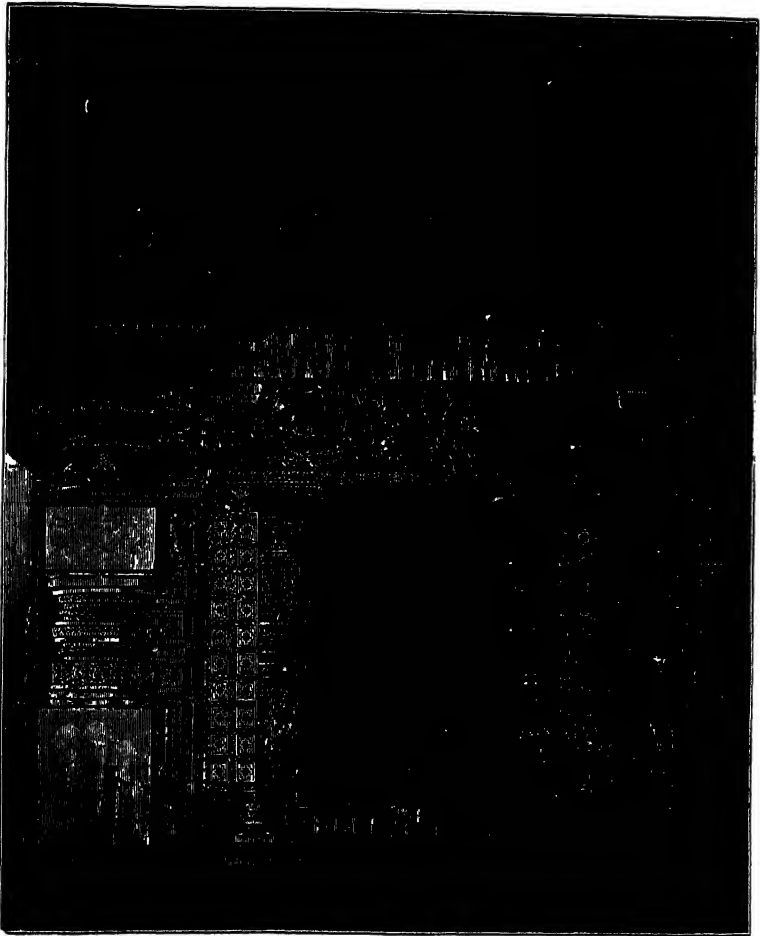
disposed equidistantly, without any attempt at the octagonal dome of the Jains or the varied arrangements subsequently attempted.

Although of no great magnificence in itself, this temple is interesting as possessing all the features which distinguish the Chalukyan style from those that surround it either on the north or south. Instead of their square plans, this one is practically star-shaped. The sikra is a straight-lined cone, and its decorations in steps is as unlike the Dravidian spire in storeys as it is to the curvilinear outline of the Jaina or northern temples. The porch, too, is open, and consists of columns spaced equidistantly over its floor, without either the bracketing arrangements of the southern or the domical forms of the northern styles. Situated as it was locally, half-way between the Dravidian and northern styles, the Chalukyan borrowed occasionally a feature or form from one or from the other, but never to such an extent as to obliterate its individuality, or to prevent its being recognised as a separate and distinct style of architecture.

When the Nizam's territory is examined, we shall probably be able to trace all the steps by which this simple village example developed into the metropolitan temple of Hammoncondah, the old capital, six miles north of Worangul. According to an inscription on its walls, this temple was erected, in A.D. 1163, by Pratapa Rudra,¹

¹ Prinsep's 'Useful Tables,' re-edited by Thomas, pp. 267-268.

who, though not exactly himself a Chalukya in blood, succeeded to their possessions and their style. The temple itself is triple, having three detached cells of very considerable dimensions, in front of which is a portico, supported by between 240 or 300 pillars, disposed in a



217. Doorway of Great Temple at Hammoncondal. (From a Photograph.)

varied and complicated pattern,¹ but without any sign, so far as I can trace, of the Jaina octagonal arrangement for a dome. Like

¹ If all the quadrants of this portico were equal the numbers ought to be 300, or 75 in each, but I fancy a considerable portion of two of them was cut off by the site of the temple. As I have nothing but photographs to go by, and they only show the exterior, even this is uncertain, and the dimensions I cannot even guess at. They are very large, however, for a Hindu temple.

most of these late temples, this one was never finished. It was too extensive for one king's reign, even for one so powerful as he was who undertook it, and before it was heartily taken up again the Mahomedans were upon them (in A.D. 1309), and there was an end of Hindu greatness and of Hindu art.

Some of its details, however, are of great beauty, especially the entrances, which are objects on which the architects generally lavished their utmost skill. The preceding woodcut (No. 217) will explain the form of those of the great temple, as well as the general ordinances of the pillars of the great portico. Nothing in Hindu art is more pleasing than the pierced slabs which the Chalukyas used for windows. They are not, so far as I recollect, used—certainly, not extensively—in any other style, but as used by them are highly ornamental and appropriate, both externally and internally.

The pillars, too, are rich, without being overdone; and as it is only in pairs that they are of the same design, the effect of the whole is singularly varied, but at the same time pleasing and elegant.

There are at Hammoncondah or Worangul a great number of smaller temples and shrines, in the same style as the great temple, and, like it, apparently all dedicated to Siva, from the constant presence of his bull everywhere. Most are ruined; but whether this is owing to Moslem bigotry or faulty construction, it is difficult to say. Judging from appearances, I am inclined to believe the latter was the true cause. The mode of building is without mortar, and the joints are by no means well fitted. The style is also remarkably free from figure-sculpture, which is generally the thing that most easily excites the iconoclastic feelings of the followers of the Prophet.

In Worangul there are four Kirti Stambhas, as they are called, facing one another, as if they formed the entrances to a square enclosure (Woodcut No. 218). No wall is there, however, nor is there anything inside; so the object of their erection is by no means apparent. They were set up by the same Pratapa Rudra who built the great temple in the old capital, and built several others in this new city. It cannot be said they are particularly elegant specimens of art. Their main interest lies in their being the lineal descendants of the four gateways at Sanchi (Woodcut No. 33), and they may have been erected to replace some wooden or frailer structure which had fallen into decay. Whether this is so or not, they are curious as exemplifying how, in the course of a thousand years or thereabouts, a wooden style of building may lose all traces of its origin and become as essentially lithic as these, but still betray its origin as clearly as they do; for it seems most unlikely that any such form could have been invented by any one using stone constructions, and that only.



218.

Kirti Stambha at Worangul. (From a Photograph.)

МYSORE.

It is in the province of Mysore, however, that the Chalukyan style attained its fullest development and highest degree of perfection during the three centuries—A.D. 1000 to 1300—in which the Hoisala Bellalas had supreme sway in that country. Three temples, or rather groups of temples, were erected by them—the first at a place called Somnathpûr, south of Mysore, by Vinaditya Bellala, who ascended the throne A.D. 1043 ; the second at Baillûr, in the centre of the province, owed its origin apparently to Vishnu Verddhana, in or about A.D. 1114 ; the last and greatest at a place they called Dwarsamudra—the Gate of the Sea—now known as Hullabîd, not far from the last-named, from which the capital was removed by Vijaya Narsinha, in 1145. It continued to be the metropolis of the kingdom, till it was destroyed

and the building of the great temple stopped by the Mahomedan invasion in A.D. 1310-1311.¹

Even in this short series we see evidence of that downward progress of art, especially in sculpture, which is everywhere the characteristic of Hindu art. Though the design is the grandest, the sculpture and details of Hullabîd are inferior to those of Baillûr, and Somnathpûr seems superior to both. We consequently long to trace back the history of the style to some more distant date, when we might find it emerging in purity and elegance from some unknown prototype. Unfortunately, we are not at present able to do this. We are obliged to leap over the dark ages to the caves and temples of Badami and Aiwulli, and have no intermediate examples to connect the two. It is more than probable that they do exist, and will be found when looked for. Meanwhile, however, we can only assume that the star-like plans and peculiar details of the style were elaborated between the 6th and the 10th centuries in Central and Western India, but where and by whom remains still to be discovered.

Like the great temple at Hammoncondah, that at Somnathpûr is triple, the cells, with their sikras, being attached to a square pillared hall, to the fourth side of which a portico is attached, in this instance of very moderate dimensions.² The whole stands in a square cloistered court, and has the usual accompaniments of entrance-porches, stambhas, &c.

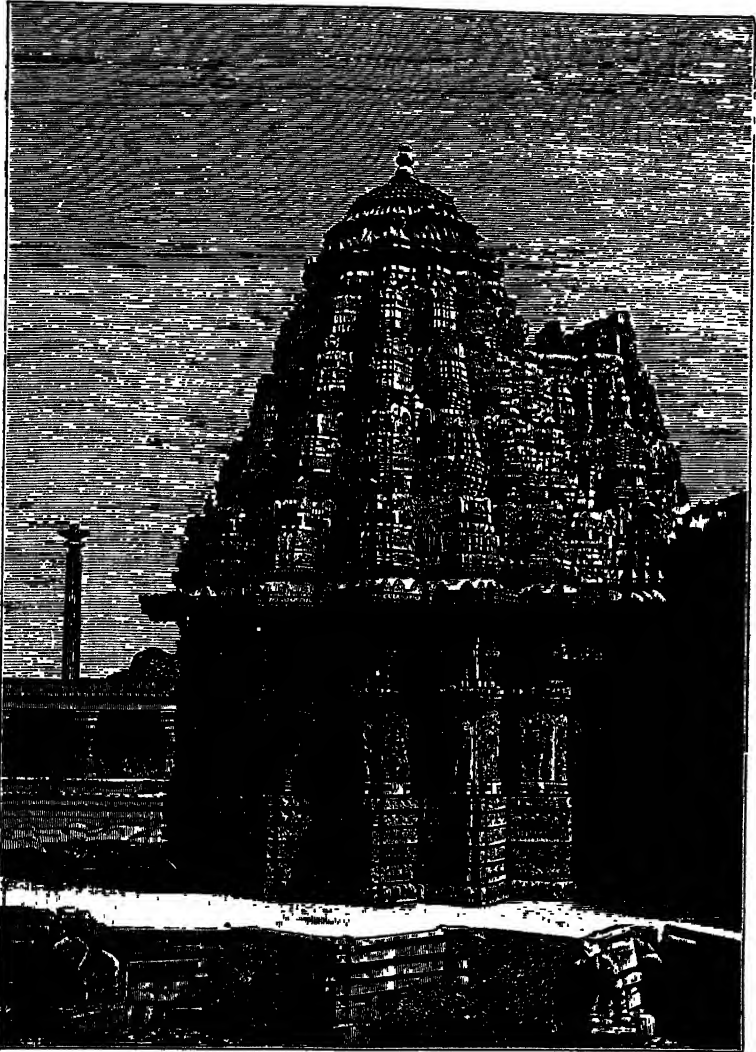
The following illustration (No. 219) will give an idea—an imperfect one, it must be confessed—of the elegance of outline and marvellous elaboration of detail that characterises these shrines. Judging from the figure of a man in one of the photographs, its height seems to be only about 30 ft., which, if it stood in the open, would be almost too small for architectural effect; but in the centre of an enclosed court, and where there are no larger objects to contrast with it, it is sufficient, when judiciously treated, to produce a considerable impression of grandeur, and apparently does so in this instance.

The temple at Somnathpûr is a single but complete whole; that at Baillûr, on the other hand, consists of one principal temple, surrounded by four or five others and numerous subordinate buildings, enclosed in a court by a high wall measuring 360 ft. by 440 ft., and having two very fine gateways or gopuras in its eastern front. As

¹ These dates are taken from a list of this dynasty among the Mackenzie MSS., quoted by Prinsep, 'Useful Tables,' xli., and are confirmed by the architectural evidence and other indications.

² I regret that I have been unable to get a plan of this temple or, indeed, of

any triple temple. That at Girnar (Woodcut No. 127) belongs to another religion, and is too far distant in locality to assist us here. An imperfect one might be compiled from the photographs, but I have not even an approximate dimen-

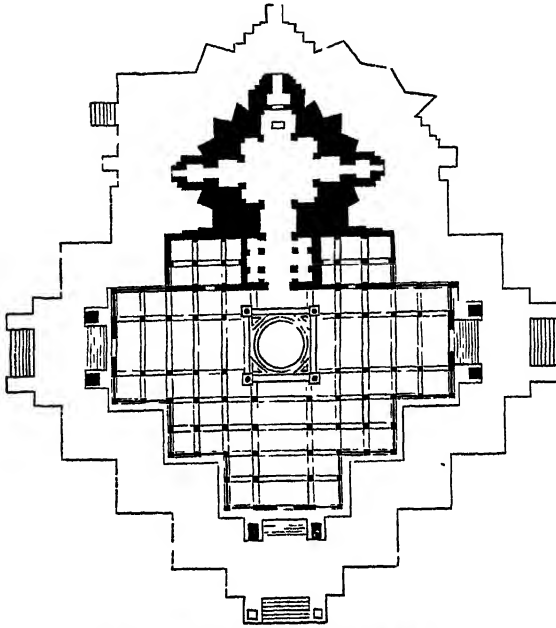


219.

Temple at Somnathpūr. (From a Photograph.)

will be seen from the following plan (Woodcut No. 220), the great temple consists of a very solid vimana, with an anterala, or porch; and in front of this a porch of the usual star-like form, measuring 90 ft. across. The whole length of the temple, from the east door to the back of cell, is 115 ft., and the whole stands on a terrace about 3 ft. high, and from 10 ft. to 15 ft. wide. This is one of the characteristic features of Chalukyan design, and adds very considerably to the effect of their temples.

The arrangements of the pillars have much of that pl



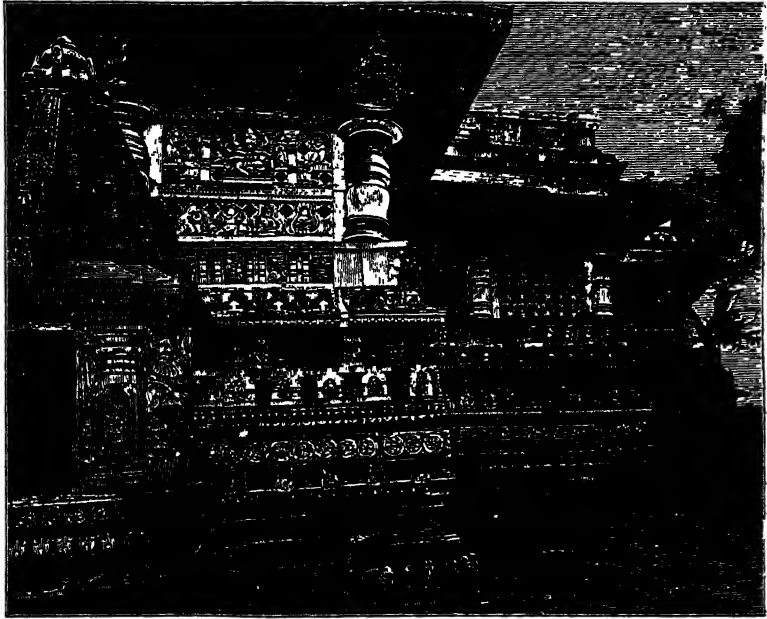
220.

Plan of Great Temple at Baillúr. Scale 50 ft. to 1 in.

subordination and variety of spacing which is found in those of the Jains, but we miss here the octagonal dome, which gives such poetry and meaning to the arrangements they adopted. Instead of that, we have only an exaggerated compartment in the centre, which fits nothing, and, though it does give dignity to the centre, it does it so clumsily as to be almost offensive in an architectural sense.

It is not, however, either to its dimensions, or the disposition of its plan, that this temple owes its pre-eminence among others of its class, but to the marvellous elaboration and beauty of its details. The effect of these, it is true, has been, in modern times, considerably marred by the repeated coats of whitewash which the present low order of priests consider the most appropriate way of adding to the beauty of the most delicate sculptures. Notwithstanding this, however, their outline can always be traced, and where the whitewash has not been applied, or has been worn off, their beauty comes out with wonderful sharpness.

The following woodcut (No. 221) will convey some idea of the richness and variety of pattern displayed in the windows of the porch. These are twenty-eight in number, and all are different. Some are pierced with merely conventional patterns, generally star-shaped, and with foliated bands between; others are interspersed with figures and mythological subjects—the nearest one, for instance, on the left, in the woodcut, represents the Varaha Avatar, and others



221.

View of part of Porch at Baillûr. (From a Photograph.)

different scenes connected with the worship of Vishnu, to whom the temple is dedicated. The pierced slabs themselves, however, are hardly so remarkable as the richly-carved base on which they rest, and the deep cornice which overshadows and protects them. The amount of labour, indeed, which each facet of this porch displays is such as, I believe, never was bestowed on any surface of equal extent in any building in the world; and though the design is not of the highest order of art, it is elegant and appropriate, and never offends against good taste.

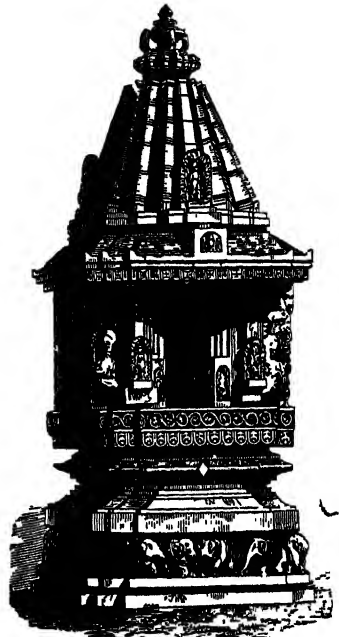
The sculptures of the base of the vimana, which have not been whitewashed, are as elaborate as those of the porch, in some places more so; and the mode in which the undersides of the cornices have been elaborated and adorned is such as is only to be found in temples of this class. The upper part of the tower is anomalous. It may be that it has been whitewashed and repaired till it has assumed its present discordant appearance, which renders it certainly a blot on the whole design. My own impression rather is, that, like many others of its class, it was left unfinished, and the upper part added at subsequent periods. Its original form most probably was that of the little pavilions that adorn its portals, one of which is represented in the following woodcut (No. 222), which has all the peculiar features of the style—the flat band on each face, the three star-like projections between, and the peculiar crowning ornament of the

style. The plan of the great tower, and the presence of the pavilions where they stand, seems to prove almost beyond doubt that this was the original design ; but the design may have been altered as it progressed, or it may, as I suspect, have been changed afterwards.

There seems to be little or no doubt about the date of this temple. It was erected by Vishnu Verddhana, the fourth king of the race, to commemorate his conversion by the celebrated Rama Anuja from the Jainia to the Hindu faith. He ascended the throne A.D. 1114, and his conversion took place soon afterwards ; but it is possible he did not live to finish the temple, and as the capital was removed by the next king to Hullabîd, it is possible that the vimana of the great temple, and the erection of some at least of the smaller shrines, may belong to a subsequent period.

HULLABÎD.

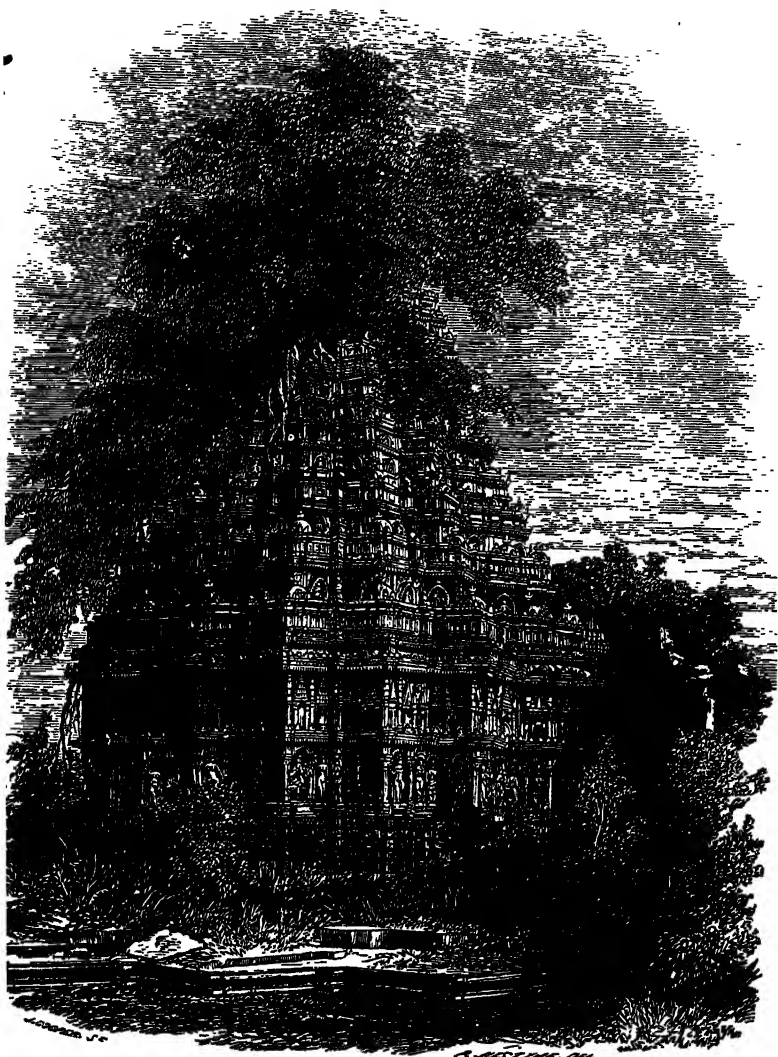
The earliest temple known to exist at Hullabîd is a small detached shrine, known by the inexplicable name of Kait Iswara, dedicated to Sîva, and probably erected by Vijaya, the fifth king of the Bellala dynasty. Its general appearance will be understood from the next woodcut (No. 223). It is star-shaped in plan, with sixteen points, and had a porch, now so entirely ruined and covered up with vegetation that it is difficult to make out its plan. Its roof is conical, and from the basement to the summit it is covered with sculptures of the very best class of Indian art, and these so arranged as not materially to interfere with the outlines of the building, while they impart to it an amount of richness only to be found among specimens of Hindu art.¹ If it were possible to illustrate this little temple in



Pavilion at Baillâr. (From a photograph.)

¹ In a very few years this building will be entirely destroyed by the trees, which have fastened their roots in the joints of the stones. In a drawing in the Mackenzie collection in the India Office, made in the early part of this century, the building is shown entire. Twenty years ago

it was as shown at p. 398. A subsequent photograph shows it almost hidden ; a few years more, if some steps are not taken to save it, it will have perished entirely. A very small sum would save it ; and, as the country is in our charge, it is hoped that the expenditure will not be grudged.



223.

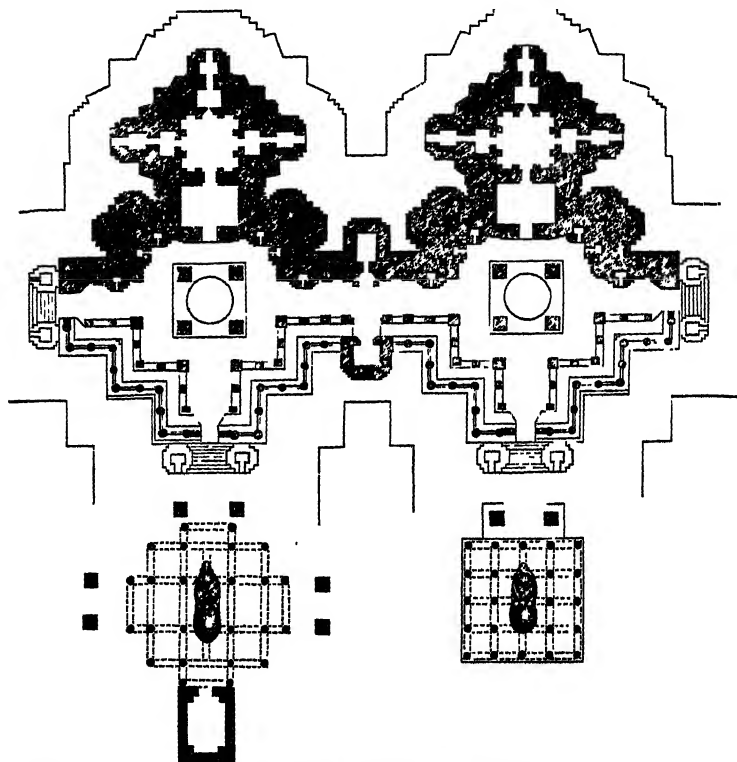
Kait Iswara, Hullabíd. (From a Photograph by Capt. Tripa.)

anything like completeness, there is probably nothing in India which would convey a better idea of what its architects were capable of accomplishing.

It is, however, surpassed in size and magnificence by its neighbour, the great temple at Hullabíd, which, had it been completed, is one of the buildings on which the advocate of Hindu architecture would desire to take his stand. Unfortunately, it never was finished, the works having been stopped by the Mahomedan conquest in 1310 A.D., after they had been in progress apparently for eighty-six

years. It is instructive to observe that the single century that elapsed between the execution of the sculpture of the Kait Iswara and of this temple, was sufficient to demonstrate the decay in style which we have already noticed as an inherent characteristic of Indian art. The sculptures of Hullabid are inferior to those of the Kait Iswara, and those of that temple, again, to those at Baillūr.

The general arrangements of the building are given on the annexed plan (Woodcut No. 224), from which it will be perceived that it is



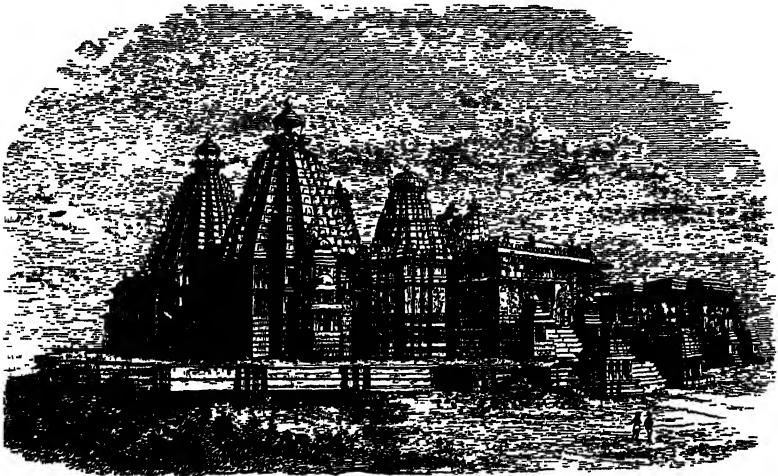
224.

Plan of Temple at Hullabid. Scale 50 ft. to 1 in.

a double temple. If it were cut into halves, each part would be complete with a pillared porch of the same type as that at Baillūr, above referred to, an anterala or intermediate porch, and a sanctuary containing a lingam, the emblem of Siva. Besides this, each half would have in front of it a detached, pillared porch as a shrine for the Bull Nundi, which, of course, was not required in a Vaishnava temple. Such double temples are by no means uncommon in India, but the two sanctuaries usually face each other, and have the porch between them. Its dimensions may roughly be stated as 200 ft. square over all, including all the detached pavilions. The temple itself is 160 ft.

north and south, by 122 ft. east and west. Its height, as it now remains, to the cornice is about 25 ft. from the terrace on which it stands. It cannot, therefore, be considered by any means as a large building, though large enough for effect. This, however, can hardly be judged of as it now stands, for there is no doubt but that it was intended to raise two pyramidal spires over the sanctuaries, four smaller ones in front of these, and two more, one over each of the two central pavilions. Thus completed, the temple would have assumed something like the outline shown in the woodcut (No. 225), and if carried out with the richness of detail exhibited in the Kait Iswara (Woodcut No. 223) would have made up a whole which it would be difficult to rival anywhere.

The material out of which this temple is erected is an indurated



225.

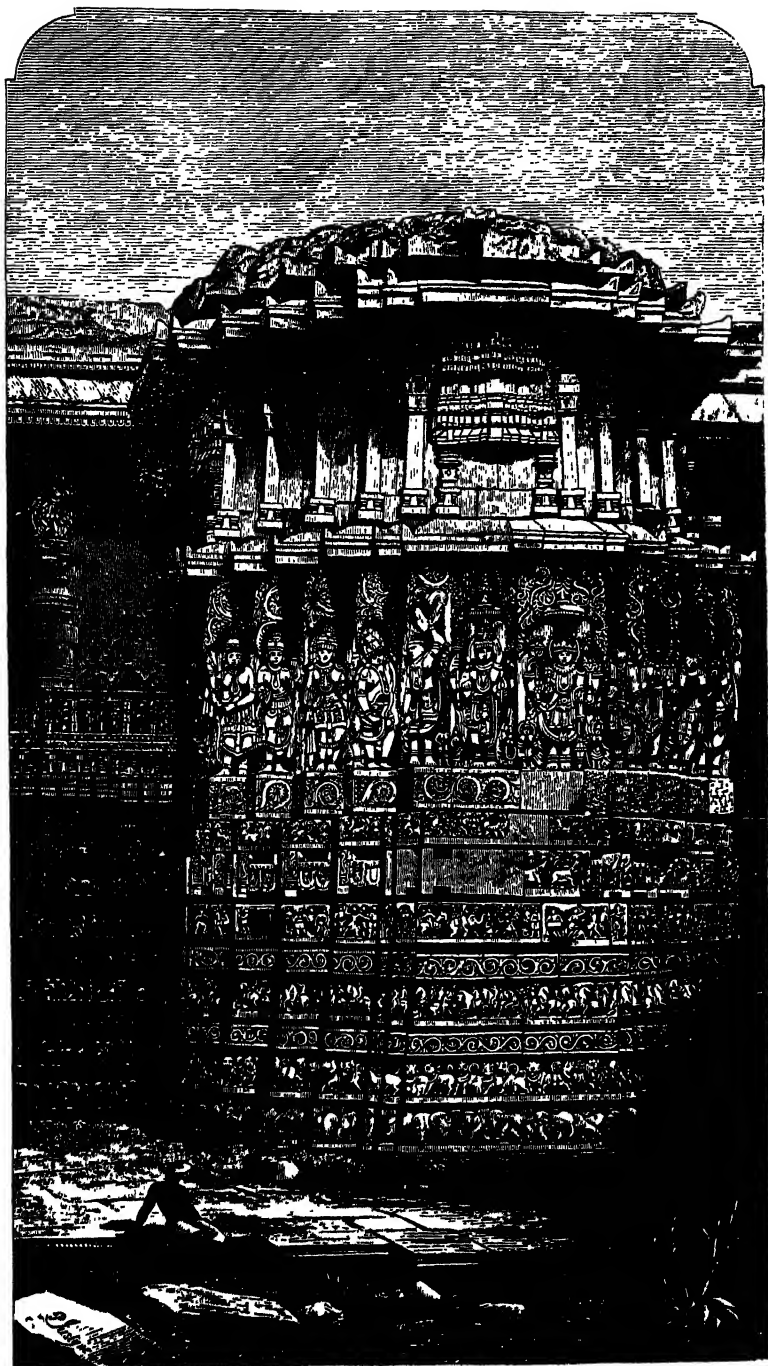
Restored View of Temple at Hullabid.

potstone, of volcanic origin, found in the neighbourhood. This stone is said to be soft when first quarried, and easily cut in that state, though hardening on exposure to the atmosphere. Even this, however, will not diminish our admiration of the amount of labour bestowed on the temple, for, from the number of parts still unfinished, it is evident that, like most others of its class, it was built in block, and carved long after the stone had become hard. As we now see it, the stone is of a pleasing creamy colour, and so close-grained as to take a polish like marble. The pillars of the great Nundi pavilion, which look as if they had been turned in a lathe, are so polished as to exhibit what the natives call a double reflection—in other words, to reflect light from each other. The enduring qualities of the stone seem to be unrivalled, for, though neglected and exposed to all the vicissitudes of a tropical climate for more than six centuries, the

minutest details are as clear and sharp as the day they were finished. Except from the splitting of the stone arising from bad masonry, the building is as perfect as when its erection was stopped by the Mahomedan conquest.

It is, of course, impossible to illustrate completely so complicated and so varied a design; but the following woodcut (No. 226) will suffice to explain the general ordonnance of its elevation. The building stands on a terrace ranging from 5 ft. to 6 ft. in height, and paved with large slabs. On this stands a frieze of elephants, following all the sinuosities of the plan and extending to some 710 ft. in length, and containing not less than 2000 elephants, most of them with riders and trappings, sculptured as only an Oriental can represent the wisest of brutes. Above these is a frieze of "shardalas," or conventional lions—the emblems of the Hoisala Bellalas who built the temple. Then comes a scroll of infinite beauty and variety of design; over this a frieze of horsemen and another scroll; over which is a bas-relief of scenes from the 'Ramayana,' representing the conquest of Ceylon and all the varied incidents of that epic. This, like the other, is about 700 ft. long. (The frieze of the Parthenon is less than 550 ft.) Then come celestial beasts and celestial birds, and all along the east front a frieze of groups from human life, and then a cornice, with a rail, divided into panels, each containing two figures. Over this are windows of pierced slabs, like those of Baillūr, though not so rich or varied. These windows will be observed on the right and left of the woodcut. In the centre, in place of the windows, is first a scroll, and then a frieze of gods and heavenly apsaras—dancing girls and other objects of Hindu mythology. This frieze, which is about 5 ft. 6 in. in height, is continued all round the western front of the building, and extends to some 400 ft. in length. Siva, with his consort Parvati seated on his knee, is repeated at least fourteen times; Vishnu in his nine Avatars even oftener. Brahma occurs three or four times, and every great god of the Hindu Pantheon finds his place. Some of these are carved with a minute elaboration of detail which can only be reproduced by photography, and may probably be considered as one of the most marvellous exhibitions of human labour to be found even in the patient East.

It must not, however, be considered that it is only for patient industry that this building is remarkable. The mode in which the eastern face is broken up by the larger masses, so as to give height and play of light and shade, is a better way of accomplishing what the Gothic architects attempted by their transepts and projections. This, however, is surpassed by the western front, where the variety of outline, and the arrangement and subordination of the various facets in which it is disposed, must be considered as a masterpiece of design in its class. If the frieze of gods were spread along a plain surface it



would lose more than half its effect, while the vertical angles, without interfering with the continuity of the frieze, give height and strength to the whole composition. The disposition of the horizontal lines of the lower friezes is equally effective. Here again the artistic combination of horizontal with vertical lines, and the play of outline and of light and shade, far surpass anything in Gothic art. The effects are just what the mediæval architects were often aiming at, but which they never attained so perfectly as was done at Hullabid.

Before leaving Hullabid, it may be well again to call attention to the order of superposition of the different animal friezes, alluded to already, when speaking of the rock-cut monastery described by the Chinese Pilgrims (*ante*, p. 135). There, as here, the lowest were the elephants; then the lions; above these came the horses; then the oxen; and the fifth storey was in the shape of a pigeon. The oxen here is replaced by a conventional animal, and the pigeon also by a bird of a species that would puzzle a naturalist. The succession, however, is the same, and, as mentioned above, the same five genera of living things form the ornaments of the moonstones of the various monuments in Ceylon. Sometimes in modern Hindu temples only two or three animal friezes are found, but the succession is always the same, the elephants being the lowest, next above them are the lions, and then the horses, &c. When we know the cause of it, it seems as if this curious selection and succession might lead to some very suggestive conclusions. At present we can only call attention to it in hopes that further investigation may afford the means of solving the mystery.

If it were possible to illustrate the Hullabid temple to such an extent as to render its peculiarities familiar, there would be few things more interesting or more instructive than to institute a comparison between it and the Parthenon at Athens. Not that the two buildings are at all like one another; on the contrary, they form the two opposite poles—the alpha and omega of architectural design; but they are the best examples of their class, and between these two extremes lies the whole range of the art. The Parthenon is the best example we know of pure refined intellectual power applied to the production of an architectural design. Every part and every effect is calculated with mathematical exactness, and executed with a mechanical precision that never was equalled. All the curves are hyperbolas, parabolas, or other developments of the highest mathematical forms—every optical defect is foreseen and provided for, and every part has a relation to every other part in so recondite a proportion that we feel inclined to call it fanciful, because we can hardly rise to its appreciation. The sculpture is exquisitely designed to aid the perfection of the masonry—severe and godlike, but with no condescension to the lower feelings of humanity.

The Hullabid temple is the opposite of all this. It is regular, but with a studied variety of outline in plan, and even greater variety in detail. All the pillars of the Parthenon are identical, while no two facets of the Indian temple are the same; every convolution of every scroll is different. No two canopies in the whole building are alike, and every part exhibits a joyous exuberance of fancy scorning every mechanical restraint. All that is wild in human faith or warm in human feeling is found portrayed on these walls; but of pure intellect there is little—less than there is of human feeling in the Parthenon.

It would be possible to arrange all the buildings of the world between these two extremes, as they tended toward the severe intellectual purity of the one, or to the playful exuberant fancy of the other; but perfection, if it existed, would be somewhere near the mean. My own impression is, that if the so-called Gothic architects had been able to maintain for two or three hundred years more the rate of progress they achieved between the 11th and the 14th century, they might have hit upon that happy mean between severe constructive propriety and playful decorative imaginings which would have combined into something more perfect than the world has yet seen. The system, however, as I have endeavoured to point out elsewhere, broke down before it had acquired the requisite degree of refinement, and that hope was blighted never to be revived. If architecture ever again assumes an onward path, it will not be by leaning too strongly towards either of the extremes just named, but by grasping somewhere the happy mean between the two.

For our present purpose, the great value of the study of these Indian examples is that it widens so immensely our basis for architectural criticism. It is only by becoming familiar with forms so utterly dissimilar from those we have hitherto been conversant with, that we perceive how narrow is the purview that is content with one form or one passing fashion. By rising to this wider range we shall perceive that architecture is as many-sided as human nature itself, and learn how few feelings and how few aspirations of the human heart and brain there are that cannot be expressed by its means. On the other hand, it is only by taking this wide survey that we appreciate how worthless any product of architectural art becomes which does not honestly represent the thoughts and feelings of those who built it, or the height of their loftiest aspirations.

To return, however, from this digression. There are some eight or nine different temples in this style illustrated by photographs in the great work on the 'Architecture of Dharwar and Mysore,'¹ which exhibit the peculiarities of this style in more or less detail; but none

of these plates are accompanied by plans or details that throw new light on the subject, and none of the temples are either so large or so beautiful as those just described, so that the enumeration of their unfamiliar names would add very little to the interest of the subject.

It would be very interesting, however, if we could adduce some northern examples of the style from either the capital city of the Ballabhis, or some town in their kingdom. For about two centuries—A.D. 500 to 700—they were a leading power in India, and closely allied to the Chalukyas; and their style, if any examples could be found, would throw great light on that of their southern allies just at the period when it is most wanted. Unfortunately, however, even the site of their capital is unknown. If it were at Wulleh, near Gogo, on the shores of the Gulf of Cambay, as is generally supposed, it has perished root and branch. Not one vestige of its architecture now remains, and what antiquities have been found seem all to belong to a much more modern period, when a city bearing that name may have existed on the spot. If it were situated near Anhulwarra Puttun, which seems far more probable, it has been quarried to supply materials for the successive capitals which from that time forward have occupied that favoured neighbourhood, and it would require the keen eye of a practised archæologist to detect Chalukyan details in the temples and mosques that have been erected there during the last 800 years. Nothing of the sort has yet been attempted, and no materials consequently exist for the elucidation of one of the most interesting chapters in the history of Indian art.

BOOK VI.

NORTHERN OR INDO-ARYAN STYLE.



CHAPTER I.

INTRODUCTORY.

CONTENTS.

Introductory—Dravidian and Indo-Aryan Temples at Badami—Modern Temple at Benares.

OF the three styles into which Hindu architecture naturally divides itself, the northern is found spread over a far larger portion of the country than either of the other two. It wants, however, the compactness and strongly-marked individuality of the Dravidian, and never was developed with that exuberance which characterised the southern style from the 15th to the 18th century. In many respects it resembles more the Chalukyan style, the examples being small and elegant, and found dispersed over the face of the country, where wanted, without any apparent massing together in particular spots.

Unfortunately, we have no name which would describe the style in its ethnographical and geographical relations without being open to the objection of expressing either too much or too little. In this respect the southern style is singularly fortunate : Dravidian correctly limits it to people speaking Tamil, Telugu, or some cognate dialect ; and the country where the people speaking those tongues are to be found is generally and correctly known as *Dravida Desa*, or country of the Dravidians.

The term Chalukyan, applied to the second style, is not so expressive ; but it is unobjectionable, as it cannot mislead any one. It is only a conventional term, derived from the principal known dynasty ruling in that country, applied to a style occupying a borderland between the other two, but a land that has not yet been fully surveyed, and whose boundaries cannot now be fixed with precision. Till they are, a conventional name that does not mislead is all that can be hoped for.

If it were allowable to adopt the loose phraseology of philological

ethnography, the term Aryan might be employed, as it is the name by which the people practising this style are usually known in India, and it would be particularly convenient here, as it is the correct and direct antithesis of Dravidian. It is evident, however, that any such term, if applied to architecture, ought to be descriptive of some style practised by that people, wherever they settled, all across Europe and Asia, between the shores of the Atlantic and the Bay of Bengal;¹ and it need hardly be said that no such style exists. If used in conjunction with the adjective Indian or Indo, it becomes much less objectionable, and has the advantage of limiting its use to the people who are generally known as Aryans in India—in other words, to all those parts of the country where Sanscrit was ever spoken, or where the people now speak tongues so far derived from Sanscrit as to be distinguishable as offsets of that great family of languages. Its use, in this respect, has the great convenience that any ordinary ethnographical or linguistic map of India is sufficient to describe the boundaries of the style. It extends, like the so-called Aryan tongues, from the Himalayas to the Vindhya mountains. On the east, it is found prevalent in Orissa; and on the west in Malharashtra. Its southern boundary between these two provinces will only be known when the Nizam's territory is architecturally surveyed; but meanwhile we may rest assured that wherever it is traced the linguistic and architectural boundary-lines will be found coincident.

Another reason why the term Aryan should be applied to the style is, that the country just described, where it prevails, is, and always has been, called *Aryavarta* by the natives themselves. They consider it as the land of the pure and just—meaning thereby the Sanscrit-speaking peoples—as contradistinguished from that of the casteless *Dasyus*, and other tribes, who, though they may have adopted Brahmanical institutions, could not acquire their purity of race.

The great defect of the term, however, is that the people inhabiting the north of India are not Aryans in any reasonable sense of the term, whatever philologists may say to the contrary. The Sanscrit-speaking people, who came into India 2000 or it may be 3000 years B.C., could never have been numerically one-half of the inhabitants of the country, except, perhaps, in some such limited district as that between the Sutlej and the Jumna; and since the Christian Era no Aryan race has migrated eastward across the Indus, but wave after wave of peoples of Turanian race, under the names of *Yavanas*,

¹ In 1848 Gen. Cunningham applied the term Aryan to the architecture of Kashmir, apparently on the strength of a pun ('Journal of the Asiatic Society of Bengal,' September, 1848, p. 242). This, however, was limiting a term that belongs to two continents to an insignificant valley, in one of them. It was, besides, wholly uncalled for. The term Kashmiri was amply sufficient, and all that was wanted for so strictly local a style.

Sakas, Hunas, or Mongols, have poured into India. This, combined with the ascendancy of the aboriginal races during the period when Buddhism was the religion of the country, has so completely washed out Aryanism from northern India during the building ages, that there is probably no community there which could claim one-tenth of pure Aryan blood in its veins, and with nine-tenths of impurity the term is certainly a misnomer. If it were not, we would certainly find some trace of external Aryan affinities in their style ; but this is not the case. In fact, no style is so purely local, and, if the term may be used, so aboriginal, as this. The origin of the Buddhist style is obvious and unmistakeable ; that of the Dravidian and Chalukyan nearly as certain, though not quite so obvious : but the origin of the northern Hindu style remains a mystery, unless, indeed, the solution suggested above (*ante*, p. 224) be considered an explanation. It may be so, to some extent ; but I confess it is to my mind neither quite satisfactory nor sufficient.

The style was adopted by the Jains, who, as the successors of the Buddhiists, certainly were not Aryans, and several examples of the peculiar forms of their vimanas, or sikras have already been given (Woodcuts Nos. 137, 145, &c.) ; but it still remains to be ascertained from what original form the curvilinear square tower could have arisen. There is nothing in Buddhist, or any other art, at all like it. It does not seem to have been derived from any wooden form we know, nor from any brick or stone, or tile mode of roofing found anywhere else. I have looked longer, and, perhaps, thought more, on this problem than on any other of its class connected with Indian architecture, but I have no more plausible suggestion to offer than that hinted at above. The real solution will probably be found in the accidental discovery of old temples—so old as to betray in their primitive rudeness the secret we are now guessing at in vain. Meanwhile we probably may remain sure that it was not an imported form, but an indigenous production, and that it has no connection with the architecture of any other people Aryan, or others outside of India.

The view above proposed for the origin of the style derives considerable support from the mode in which the temples are now found distributed. There are more temples now in Orissa than in all the rest of Hindustan put together. They are very frequent in Maharashtra, and, if we admit the Jains, who adopted this style, they are ten times more frequent in Gujerat and the valley of the Nerbudda than in the valley of the Ganges, or in Aryavarta, properly so called. The first and most obvious explanation of this fact might be that the last-named country has for 600 years been occupied by a Mahomedan empire, and they, hating idolatry and idol temples, have destroyed them wherever they were so absolutely in possession of the country as to be able to do so with impunity. This may be so, and it is an

argument which, with our present materials, it is difficult to disprove. My impression, however, is that it does not correctly represent the true state of the case. That the Moslems did ruthlessly destroy Jaina temples at Ajmir, Delhi, Canouge, and elsewhere, may be quite true, but then it was because their columns served so admirably for the construction of their mosques. The astylar temples of the followers of Siva or Vishnu could only have served as quarries, and no stones that had been previously used in Hindu temples have been traced to any extent in Moslem buildings. Even admitting that at Delhi or Allahabad, or any of their capitals, all Hindu buildings have been utilised, this hardly would have been the case at such a provincial capital as Fyzabad, once Ayodhya, the celebrated capital of Dasaratha, the father of the hero of the 'Ramayana,' but where not one carved stone or even a foundation can be discovered that belongs to any ancient building.¹ The most crucial instance, however, is the city of Benares, so long the sacred city, *par excellence*, of the Hindus, yet, so far as is known, no vestige of an ancient Hindu temple exists within its precincts. James Prinsep resided there for ten years, and Major Kittoe, who had a keener eye than even his great master for an architectural form, lived long there as an archæologist and architect. They drew and measured everything, yet neither of them ever thought that they had found anything that was ancient; and it was not till Messrs. Horne and Sherring² started the theory that the buildings around the Bakariya Kund were ancient Buddhist or Hindu remains, that any one pretended to have discovered any traces of antiquity in that city. They certainly, however, are mistaken. Every building about the Bakariya Kund was not only erected by the Mahomedans, but the pillars and roofing-stones, with the fewest possible exceptions, were carved by them for the purposes for which they were applied. They may have used the stones of some deserted monasteries, or other Buddhist buildings, in the foundations or on their terraces, or for little detached pavilions; but all the architecture, properly so called, is in a style invented, or at least introduced by the Pathans, and brought to perfection under Akbar. That the Moslems did destroy Hindu temples may be admitted, but it is not clear that this was done wantonly. In all the instances which are authenticated, it

¹ 'Historical Sketch of Tahsil Fyzabad,' by P. Carnegie, Lucknow, 1870. Gen. Cunningham attempts to identify the various mounds at this place with those described as existing in Saketu by the Buddhist Pilgrims ('Ancient Geography of India,' p. 401, *et seqq.*; 'Arohæological Reports,' vol. i. p. 293, *et seqq.*) The truth of the matter, however, is, that neither Fa Hian nor Hienou

Thsang were ever near the place. The city they visited, and where the Tooth-brush-tree grew, was the present city of Lucknow, which was the capital of the kingdom in Sakya Muni's time.

² 'Sacred City of the Hindus,' London, 1868, p. 271, *et seqq.*; 'Journal of the Asiatic Society of Bengal,' vol. xxxiv. p. 1, *et seqq.*

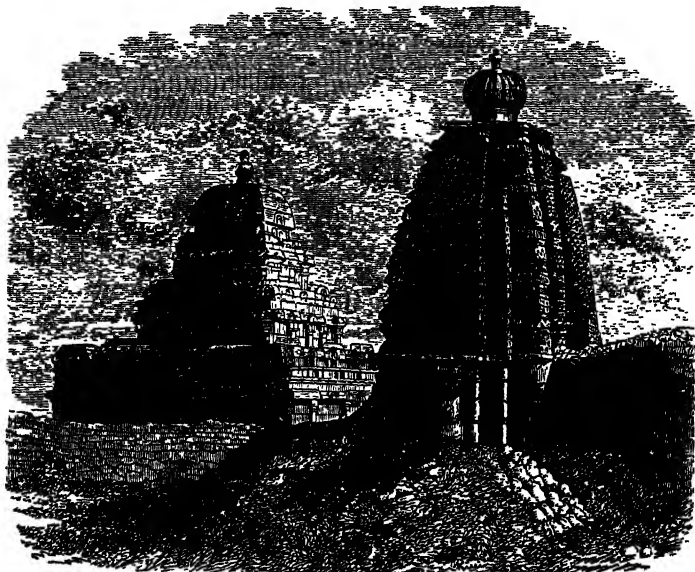
was to gain ready-made materials for their mosques, and it was not till the time of Aurungzebe that any of their monarchs felt himself sufficiently powerful or was so bigoted as to dare the power and enmity of the Brahmans of Benares, by erecting a mosque on the site of one of the most sacred temples as an insult and a defiance to the Hindus. Even then, had such a temple as the great one at Bhuvanewar ever existed in Benares, every stone of which, from the ground to the kullus, is covered with carving, it seems impossible that all these carved stones should be hid away and not one now to be found. I am myself personally tolerably familiar with Benares, and the conviction such knowledge as I have forces on my mind is, that though the city was the earliest and most important settlement of the Vedic Brahmans—the sacred city of the Aryan Hindus from the remotest ages—yet just from that cause it had fewer temples than any of the cities inhabited by less pure races. What few fragments remain are Buddhist or Jaina, and we must consequently ascribe the absence of anything really ancient more to the non-building instincts of the Brahmanical Aryans than the iconoclastic bigotry of the Moslems.

All this will be clearer as we proceed; but meanwhile it may be well to point to one or two other instances of this. The rock at Gualior was one of the earliest conquests of the Moslems, and they held it more or less directly for five centuries. They built palaces and mosques within its precincts, yet the most conspicuous objects on the hill are Hindu temples, that were erected before they obtained possession of it. In like manner Chittore was thrice besieged and thrice sacked by the Mahomedans, but its numerous buildings are intact, and I do not recollect observing a single instance of wanton destruction in the place. An even more striking instance is found at Ellora. Though Aurungzebe, the most bigoted of his race, built his capital in its neighbourhood, and lies buried within sight of the caves, there is no proof that he or any of his race were the authors of any of the damage that has been done to the idols there. Practically, they are intact, or have only received such mutilation as is easily accounted for from other causes.

It would be tedious to attempt it, but, fortunately, it is not necessary for our present purposes to go into the whole evidence; but I may state that the impression I have derived from such attention as I have been able to give to the subject is, that the absence of old temples in northern India is more owing to ethnographic than to religious causes. It seems more probable that they never existed than that they were destroyed. No temples are mentioned in the Vedas or the older Indian writings, and none were required for the simple quasi-domestic rites of their worship; and so long as they remained pure no temples were built. On the other hand, it appears as if between the fall of Buddhism and the advent of the Moslems

the Jains had stepped in with a ready-made religion and style, and the followers of Siva and Vishnu had not time to develop anything very important in these northern provinces before it was too late.

If these views are correct, it is evident that though we may use the term Indo-Aryan as the most convenient to describe and define the limits of the northern style, the name must not be considered as implying that the Aryans, as such, had anything to do either with its invention or its use. All that it is intended to convey is, that it



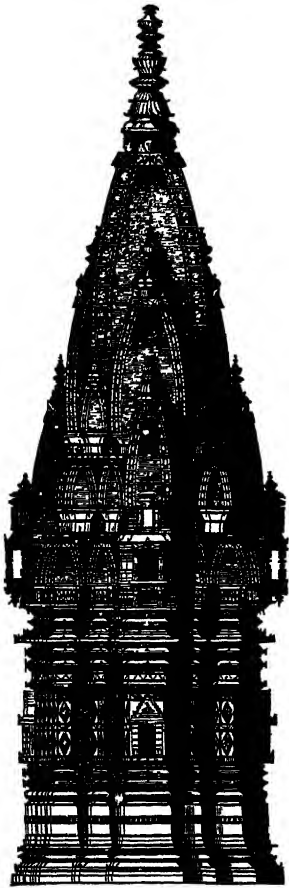
227. Dravidian and Indo-Aryan Temples at Badami. (From a Photograph.)

was invented and used in a country which they once occupied, and in which they have left a strong impress of their superior mental power and civilization.

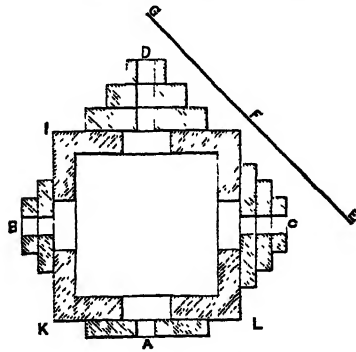
If this reservation is always borne in mind, I know of no term that more conveniently expresses the characteristics of this style, and it is consequently proposed to adopt it in the following pages as the name of the style that prevailed among the Hindus in northern India, between the Vindhya and Himalayan mountains, from the 7th century to the present day.

The general appearance of the northern temples, and the points of difference between them and those of the south, will be appreciated from the above woodcut (No. 227), representing two very ancient temples, built in juxtaposition, at Badami, in Dharwar. That on the left is a complete specimen of Dravidian architecture. There is the same pyramidal form, the same distinction of storeys, the same cells on each, as we find at Mahavellipore (Woodcut No. 181), at

Tanjore (Woodcut No. 191), or at Madura (Woodcut No. 183). In the right-hand temple, the Indo-Aryan, on the contrary, the outline of the pyramid is curvilinear; no trace of division of storeys is observable, no reminiscence of habitations, and no pillars or pilasters anywhere. Even in its modern form (Woodcut No. 228), it still retains the same characteristics, and all the lines of the pyramid or sikra are curvilinear, the base polygonal. No trace of utilitarianism is visible anywhere. If Woodcut No. 228 is compared with that at page 331 (Woodcut No. 183), the two styles will be exhibited in their most modern garbs, when, after more than 1000 years' practice, they have receded furthest from the forms in which we first meet them. Yet the Madras temple retains the



228. Modern Temple at Benares.



229. Diagram Plan of Hindu Temple.

memory of its storeys and its cells. The Bengal example recalls nothing known in civil or domestic architecture.

Neither the pyramid nor the tumulus affords any suggestion as to the origin of the form, nor does the tower, either square or circular; nor does any form of civil or domestic architecture. It does not seem to be derived from any of these; and, whether we consider it as beautiful or otherwise, it seems certainly to have been invented principally at least for æsthetic purposes, and to have retained that impress from the earliest till the present day.

The plan of a northern temple is always a square internally, and generally the same form is retained in the exterior; but very rarely, if ever, without some addition. In some instances it is only a thin

parallel projection, as at A in the diagram (No. 229). Sometimes it has two such slices added, as at B; but in the oldest examples these are only half the thickness shown here. From this they proceeded to three projections, as at C, the oldest examples being the thinnest. In more modern times the thickness of the projections became equal to their distance from each other, as at D; so that the temple became in plan practically a square, the sides of which were parallel to the diagonal of the original square or to the line E F G. Even, however, when this was the case, the cell always retained its original form and direction, and the entrance and windows kept their position on what had thus practically become the angles of the building. This is the case with the temple at Benares, shown in Woodcut No. 228, and generally also with the Jaina temples, and especially the case with the temple on the Takht-i-Suleiman at Kashmir. Although the depth and width of these offsets vary considerably even in the same design, the original square is never lost sight of; the four central angles, as at F, being always larger and more strongly accentuated than the others, and their line is always carried through to the summit of the pyramid.

It will be observed that by this process we have arrived at the same form or plan for a solid building that was attained by the arrangement of pillars described above, page 216. In fact, the two forms were elaborated simultaneously, and were afterwards constantly used together. My impression is, that the pillared arrangement is the oldest, and led to the deepening of the additions to the solid square till the two became identical in plan. Whether this were so or not, it is one of the most distinguishing features of northern Hindu architecture.

In the very centre of India, near a place marked Adjmrghur on the map, is a sacred tank, from which it is said that the Soane flows to the north, the Mahanuddi to Cuttack in the Bay of Bengal, and the Nerbudda to the Indian Ocean. All these rivers certainly have their sources in the hill. The spot has always been held sacred, and is surrounded by temples—as far as can be gathered from the imperfect accounts available—of great age. On the south and east of this hill extends the great and fertile table-land of Chuttocsghur. This is now, and has always been, so far as our knowledge extends, one of the principal seats of the native tribes. My conviction is, that if that country and the surrounding valleys could be examined, much older forms of these temples might be discovered—some perhaps so old as to betray the secret of their origin; but, till this is done, the Bengali devala must be relegated—like the Irish round towers¹—to the category of unexplained architectural puzzles.

¹ Curiously enough they make their | time, and both then complete and per-
appearance on the stage about the same | fect in all their details.

CHAPTER II.

ORISSA.

CONTENTS.

History—Temples at Bhuvanewar, Kanaruc, Puri, Jaj-pur, and Cuttack.

THE two provinces of India, where the Indo-Aryan style can be studied with the greatest advantage, are Dharwar on the west, and Orissa on the east coast. The former has the advantage of being mixed up with the Dravidian style, so as to admit of synonyms and contrasts that are singularly interesting, both from an ethnological and historical point of view. In Orissa, on the contrary, the style is perfectly pure, being unmixed with any other, and thus forms one of the most compact and homogeneous architectural groups in India, and as such of more than usual interest, and it is consequently in this province that the style can be studied to the greatest advantage.

One of the most marked and striking peculiarities of Orissan architecture is the marked and almost absolute contrast it presents to the style of the Dravidian at the southern end of the peninsula. The curved outline of the towers or vimanas has already been remarked upon, but, besides this, no Orissan towers present the smallest trace of any storeyed or even step-like arrangement, which is so universal further south, and the crowning member is never a dome, nor a reminiscence of one. Even more remarkable than this, is the fact that the Orissan style is almost absolutely astylar. In some of the most modern examples, as for instance in the porches added to the temples at Bhuvanewar and Puri in the 12th and 14th centuries, we do find pillars, but it is probably correct to state that, among the 500 or 600¹ original shrines at Bhuvanewar, not one pillar is to be found. This is the more remarkable, because, within sight of that capital, the caves in the Udayagiri (*ante*, p. 140) are adorned with pillars to such an extent as to show that their forms must have been usual and well known in the province before any of the temples were constructed. When we recollect that no great temple in the south was considered

¹ 'Hunter's Orissa,' vol. i. p. 233.

complete without its hall of 1000 columns, and many besides this had hundreds dispersed about the place, and used for every conceivable purpose, the contrast is more striking, and shows what a complete barrier the Chalukyas, whoever they were, interposed between the two races on this side of India, though not on the other. As a rule, every Orissan temple consists of two apartments, similar in plan, as shown in the diagram (Woodcut No. 124). The inner one is generally a cube, surmounted by a tower, here called *Bara Deul*, or *Dewul*, corresponding with the *vimana* of the south, and in it the image or images of the gods are enshrined; in front of this is a porch, called *Jagamohan*, equally a cube or approaching it, and surmounted by a pyramidal roof of varying pitch. The peculiarities are illustrated in the diagram (Woodcut No. 124) just referred to, which purports to be an elevation of the celebrated *Black Pagoda* at *Kanaruc*. It is only, however, an eye-sketch, and cannot be depended upon for minute detail and correctness, but it is sufficient to explain the meaning of the text. Sometimes one or two more porches were added in front of this one, and called *Nât* and *Bhog mandirs* (*mantapas*), but these, in almost every instance, are afterthoughts, and not parts of the original design. Be this as it may, in every instance in Orissa the tower with its porch forms the temple. If enclosed in a wall, they are always to be seen outside. There are gateways, it is true, but they are always subordinate, and there are none of those accretions of enclosures and *gopuras* that form so marked a characteristic of the southern style. There generally are other shrines within the enclosures of the great temples, but they are always kept subordinate, and the temple itself towers over everything to even a greater extent than that at *Tanjore* (Woodcut No. 191), giving a unity and purpose to the whole design, so frequently wanting in the south.

Other contrasts will come out as we proceed, but, in the meanwhile, few examples bring out more clearly the vast importance of ethnography as applied to architecture. That two people, inhabiting practically the same country, and worshipping the same gods under the guidance of the same Brahmanical priesthood, should have adopted and adhered to two such dissimilar styles for their sacred buildings, shows as clearly as anything can well do how much race has to do with these matters, and how little we can understand the causes of such contrasts, unless we take affinities or differences of race into consideration.

HISTORY.

Thanks to the industry of *Stirling* and others, the main outlines of the history of Orissa have been ascertained with sufficient accuracy to enable us to describe its architecture without the fear of making

any important chronological blunders. It is true that the dates of only two of its temples have been ascertained with tolerable certainty. The great one at Bhuvanewar is said to have been erected in or about A.D. 637, and that at Puri in A.D. 1174, nearly the first and the last of the series. My impression is that the series may be carried back to about the year 500, but in the other direction it can hardly be extended beyond the year 1200, but within these limits it seems possible to arrange the sequence of all the temples in the province without much difficulty, and to ascertain their dates with at least a fair approximate certainty.¹

With the exception of the great temple of Juganât at Puri, all the buildings described in this chapter were erected under the great Kesari dynasty, or "Lion line," as Hunter calls them. Few of the particulars of their history have been recorded, but we know at least the date of their accession, A.D. 473, and that in A.D. 1181 they were succeeded by a new dynasty, called Ganga Vansa, the third of whom was the builder of the great Puri Temple.

As mentioned in a previous part of this work, Orissa was principally Buddhist, at least from the time of Asoka, B.C. 250, till the Gupta era, A.D. 319, when all India was distracted by wars connected with the tooth relic, which was said to have been preserved at Puri—then in consequence called Danta Pura—till that time. If the invaders came by sea, as it is said they did, they probably were either Mughls

¹ I regret very much being obliged to send this chapter to press before the receipt of the second volume of Babu Rajendra Lala Mitra's 'Antiquities of Orissa.' He accompanied a Government expedition to that province in 1868 as archæologist, and being a Brahman and an excellent Sanscrit scholar, he has had opportunities of ascertaining facts such as no one else ever had. Orissa was the first province I visited in India for the purposes of antiquarian research, and like every one else, I was then quite unfamiliar with the forms and affinities of Hindu architecture. Photographs have enabled me to supply to some extent the deficiency of my knowledge at that time; but unless photographs are taken by a scientific man for scientific purposes, they do not supply the place of local experience. I feel confident that, on the spot, I could now ascertain the sequence of the temples with perfect certainty; but whether the Babu has sufficient knowledge for that purpose remains to be seen. His first volume

is very learned, and may be very interesting, but it adds little or nothing to what we already knew of the history of Orissan architecture.

I have seen two plates of plans of temples intended for the second volume. They are arranged without reference either to style or dates, so they convey very little information, and the photographs prove them to be so incorrect that no great dependence can be placed upon them. The text, which I have not seen, may remedy all this, and I hope will, but if he had made any great discoveries, such as the error in the date of the Black Pagoda, they most probably would have been hinted at in the first volume, or have leaked out in some of the Babu's numerous publications during the last seven or eight years.

Mr. Hunter, who was in constant communication with the Babu, adds very little in his work on Orissa to what we learnt long ago from Stirling's, which up to this hour remains the classical work on the province and its antiquities.

from Arrakan, or the Burmese of Pegu, and if their object was to obtain possession of the tooth, they as probably were Buddhists: but as they have left no buildings that have yet been identified as theirs, it is impossible now to determine this. Whoever they were, they were driven out, after 146 years' possession, and were succeeded in or about A.D. 473 by Yayati, the first of the Kesari line.¹ The annals of the race unfortunately do not tell us who the Kesaris were, or whence they came. From the third king before the Yavana invasion being called Bato Kesari, it seems probable it may have been only a revival of the old dynasty; and from the circumstances narrated regarding the expulsion of these strangers, it looks as if it were due more to a local rising than to extraneous aid. If they came from the interior, it was from the north-west, where a similar style seems to have prevailed. Their story, as told in their own annals, states that the first, or one of the first kings of the race, imported, about the year A.D. 500, a colony—10,000 Brahmans—from Ayodhya, and they being all bigoted Saivites, introduced that religion into the province, and rooted it so firmly there, that it was the faith of the land so long as the Kesaris ruled.² If we read 100 as the number of the Brahmans, and A.D. 600 as the date of their advent, we shall probably be nearer the truth; but be this as it may, these Brahmans were settled at Jajepur, not at Bhuvaneswar, and soon came into conflict with a class of "Old Brahmans," who had been established in the province long before their arrival. Mr. Hunter supposes them to have been Buddhists—Brahmans converted to the Buddhist faith—which seems probable, but if this were so, they would certainly have become Vaishnavas on the decline of that religion, and such, I fancy, was certainly the case in this instance.

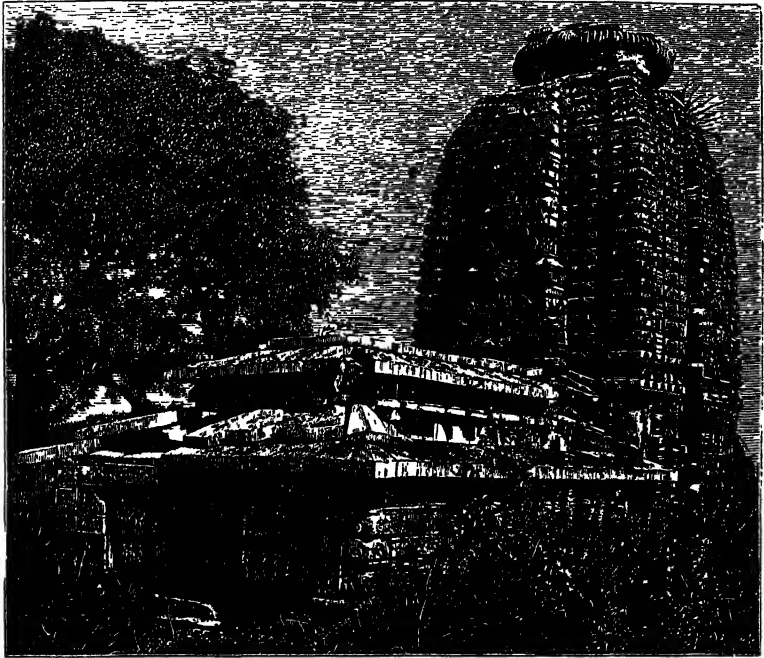
The architecture of the province seems to me to confirm this view of the case, for, unless I am very much mistaken, the oldest temple in the city of Bhuvaneswar is that called Parasurameswara (Woodcut No. 230), which from its name, as well as the subjects portrayed on its walls, I would take to be certainly Vaishnava. It may, however, belong to the preceding dynasty. Its style is certainly different from the early Kesari temples, and more like what we find in Dharwar and at other places outside the province. If, indeed, it were not found in a city which there seems every reason for thinking was founded by the Lion kings, I would not hesitate to give it a date of A.D. 450, instead of A.D. 500. It is not large, being only 20 ft. square³

¹ These particulars are taken, of course, from Stirling, 'Asiatic Researches,' vol. xv. pp. 263, 264. The whole evidence was embodied in a paper on the Amravati tope, 'Journal of the Royal Asiatic

Society,' vol. iii. (N.S.), p. 149, *et seqq.*

² Hunter's 'Orissa,' vol. i. p. 238.

³ This dimension is from Babu Rajendra's 'Orissan Antiquities,' vol. i. p. 41, but I don't like it.



230.

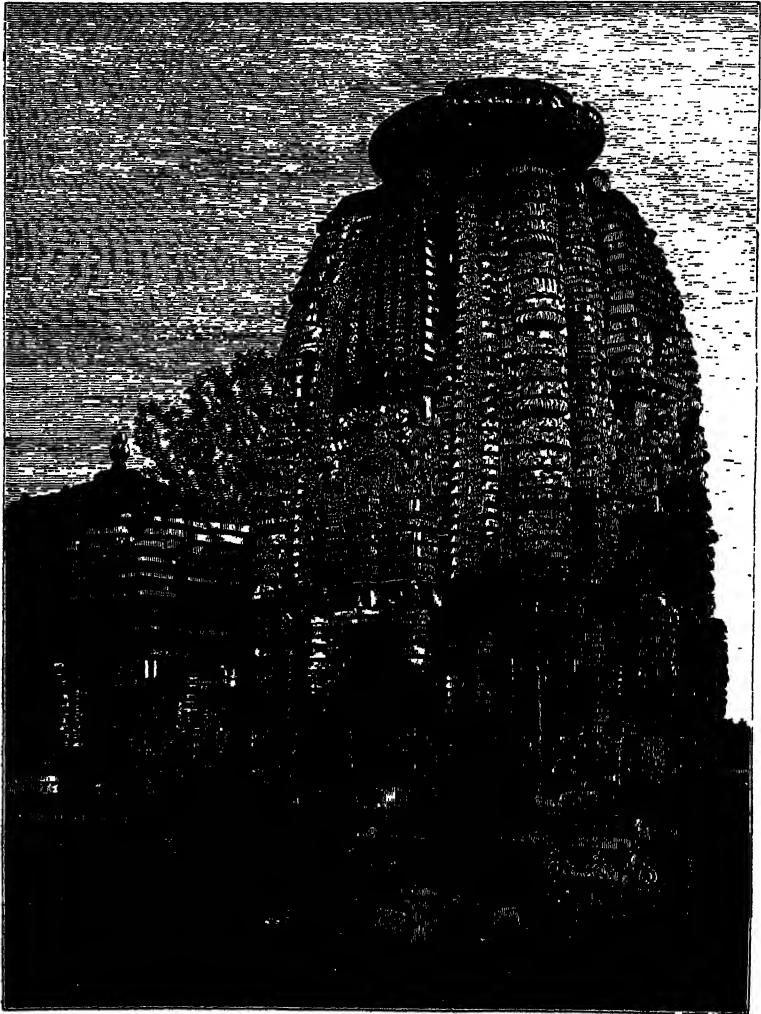
Temple of Parasurameswara. (From a Photograph.)

at its base ; but its sculptures are cut with a delicacy seldom surpassed, and there is an appropriateness about the ornaments greater than is seen in most of the temples.

The temple itself is apparently 38 ft. in height, and from the summit to the base it is covered with sculptures of the most elaborate character, but still without detracting from the simplicity and vigour of its outline.

If I am correct in assigning so early a date to the tower of this temple, it is evident that the porch must be a subsequent addition : in the first place, because it fits badly to the tower, but more because the necessities of its construction require pillars internally, and they do not occur in Orissan architecture till a long subsequent date. It may, however, be that if this is really the oldest temple of its class in Orissa, its design may be copied from a foreign example, and borrowed, with all its peculiarities, from a style practised elsewhere. Be that as it may, it is interesting as showing the mode by which light was sometimes introduced into the porches of these temples between the ends of the beams of the stone roof. As the sloping roofing-stones project considerably beyond the openings, a subdued light is introduced, without either the direct rays of the sun, or the rain being able to penetrate.

The temple of Mukteswara (Woodcut No. 231) is very similar in general design to that of Parasurameswara, but even richer and more varied in detail, and its porch partakes more of the regular Orissan type. It has no pillars internally, and the roof externally



231.

Temple of Mukteswara. (From a Photograph.)

exhibits at least the germ of what we find in the porches of the great temple at Bhuvaneswar and the Black Pagoda. Its dimensions are somewhat less than those of the last temple described, but in its class it may be considered the gem of Orissan architecture.

THE style of these temples differs so much from that of the next group, of which the great temple is the typical example, that I was at one time inclined to believe they may have belonged to different religions—this one to the Vaishnava, that to the Saiva. I have no means, however, of verifying this conjecture, and it is not always easy to do so even on the spot, for in India there is nothing so common as temples originally destined for the worship of one deity being afterwards devoted to that of another. Whatever may be the case in this instance, it is well to bear this in mind, as, whenever we have a complete history of Orissan architecture, these distinctions may lead to most important historical deductions.

Besides these, there are several other temples which, from the style of their architecture, I would feel inclined to place as earlier than the great temple. One is known as Sari Dēul, near the great temple, and another, a very complete and beautiful example, is called Moitre (*query* Mittra) Serai, which is almost a duplicate, on a small scale, of the great temple, except that it has no repetition of itself on itself. As above pointed out, almost all the ornaments on the façades of Buddhist temples are repetitions of themselves; but the Hindus do not seem to have adopted this system so early, and the extent to which it is carried is generally a fair test of the age of Hindu temples. In the great Pagoda there are eight copies of itself on each face, and in the Raj Rani the system is carried so far as almost to obliterate the original form of the temple.

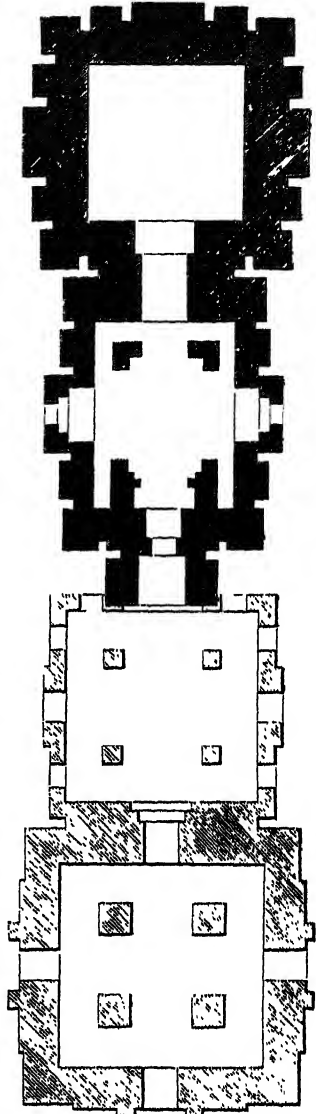
GREAT TEMPLE, BHUVANESWAR.

The great temple at Bhuvaneshwar is one of the landmarks in the style. It seems almost certainly to have been built by Lelat Indra Kesari, who reigned from A.D. 617 to A.D. 657, and, taking it all in all, it is perhaps the finest example of a purely Hindu temple in India.

Though not a building of the largest class, the dimensions of this temple in plan are, so far as I can make out, far from contemptible. The whole length is nearly 300 ft., with a breadth varying from 60 ft. to 75 ft. The original temple, however, like almost all those in Orissa, consisted only of a vimana, or Bara Dewul, and a porch or Jagamohan, shaded darker in the plan (Woodcut No. 232), and they extend only to 160 ft. The Nat and Bhog-mandirs, shaded lighter, were added in the beginning of the 12th century. Though several temples have all these four apartments, so far as I can make out, none were originally erected with them. The true Orissan temple is like that represented in Woodcut No. 124, a building with two apartments only, and these astylar, or practically so: the pillars were only introduced in the comparatively modern additions.

The outline of this temple in elevation is not, at first sight,

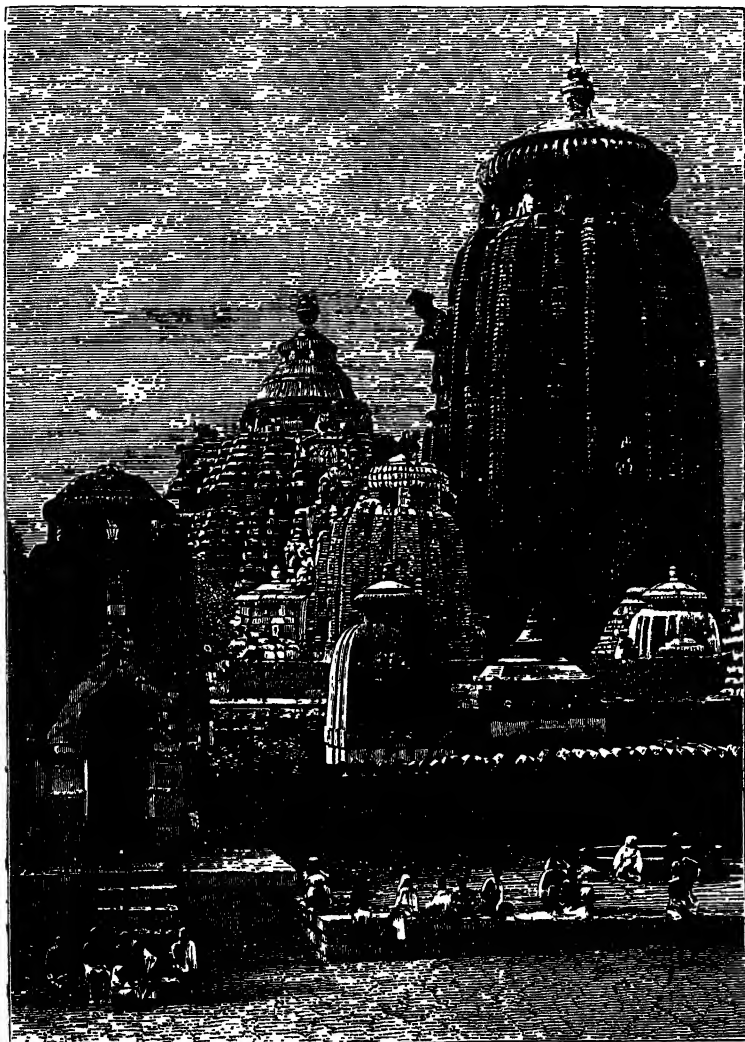
pleasing to the European eye ; but when once the eye is accustomed to it, it has a singularly solemn and pleasing aspect. It is a solid, and would be a plain square tower, but for the slight curve at the top, which takes off the hardness of the outline and introduces pleasingly the circular crowning object (Woodcut No. 233). As compared with that at Tanjore (Woodcut No. 191), it certainly is by far the finer design of the two. In plan the southern example is the larger, being 82 ft. square. This one is only 66 ft.¹ from angle to angle, though it is 75 ft. across the central projection. Their height is nearly the same, both of them being over 180 ft., but the upper part of the northern tower is so much more solid, that the cubic contents of the two are probably not very different. Besides, however, greater beauty in form, the northern example excels the other immeasurably in the fact that it is wholly in stone from the base to the apex, and—what, unfortunately, no woodcut can show—every inch of the surface is covered with carving in the most elaborate manner. It is not only the divisions of the courses, the roll-mouldings on the angles, or the breaks on the face of the tower : these are sufficient to relieve its flatness, and with any other people they would be deemed sufficient ; but every individual stone in the tower has a pattern carved upon it, not so as to break its outline, but sufficient to relieve any idea of monotony. It is, perhaps, not an exaggeration to say that if it would take a sum—say a lakh of rupees or pounds—to erect such a building as this, it would take



232. Plan of Great Temple at Bhubaneswar. (Compiled partly from Plan in Babu Rajendra's work, but corrected from Photographs. (Scale 50 ft. to 1 in.)

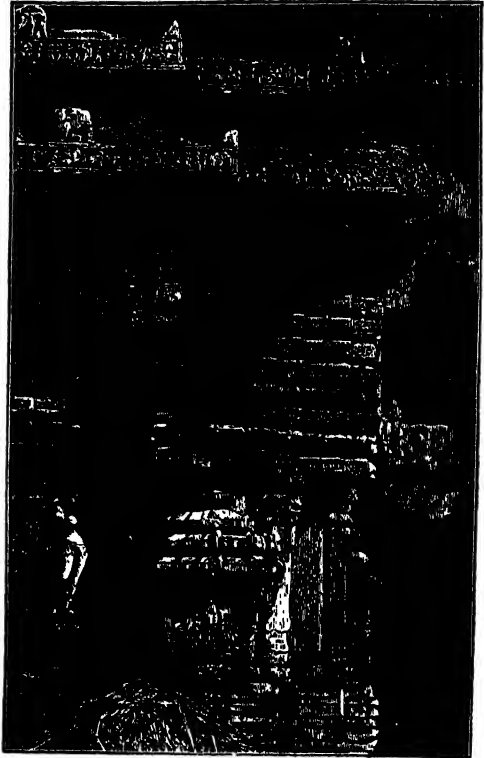
¹ This and the dimensions in plan they are only round numbers, and generally are taken from a table in Babu Rajendra's work, p. 41. I am afraid certainly incorrect, but they suffice for comparison.

three lakhs to carve it as this one is carved. Whether such an outlay is judicious or not, is another question. Most people would be of opinion that a building four times as large would produce a greater and more imposing architectural effect; but



this is not the way a Hindu ever looked at the matter. Infinite labour bestowed on every detail was the mode in which he thought he could render his temple most worthy of the deity; and, whether he was right or wrong, the effect of the whole is cer-

tainly marvellously beautiful. It is not, however, in those parts of the building shown in the woodcut that the greatest amount of carving or design was bestowed, but in the perpendicular parts seen from the courtyard (Woodcut No. 234). There the sculpture is of a very high order and great beauty of design. This, however, ought not to surprise us when we recollect that at Amravati, on the banks of the Kistnah, not far from the southern boundary of this kingdom, there stood a temple more delicate and elaborate in its carvings than any other building in India,¹ and that this temple had been finished probably not more than a century before the Kesari dynasty was established in Orissa; and though the history of art in India is written in decay, there was not much time for decline, and the dynasty was new and vigorous when this temple was erected.



234. Lower part of (Great Tower at Bhuvaneshwar.
(From a Photograph.)

Attached to the Jagamohan of this temple is a Nat-mandir, or dancing-hall, whose date is, fortunately, perfectly well known, and enables us to measure the extent of this decay with almost absolute certainty. It was erected by the wife of Salini between the years 1099 and 1104.² It is elegant, of course, for art had not yet perished among the Hindus, but it differs from the style of the porch to which it is attached more than the leanest example of Tudor art differs from the vigour and grace of the buildings of the early Edwards. All that power of expression is gone which enabled the early architects to make small things look gigantic from the exuberance of labour bestowed upon them. A glance at the Nat-mandir

¹ 'Tree and Serpent Worship,' plates 48-98. ² Hunter's 'Orissa,' vol. i. p. 287.

is sufficient for the mastery of its details. A week's study of the Jagamohan would every hour reveal new beauties.

The last woodcut may convey some idea of the extent to which the older parts were elaborated: but even the photograph hardly enables any one not familiar with the style to realise how exquisite the combination of solidity of mass with exuberance of ornament really is.

During the four centuries and a half which elapsed between the erection of these two porches, Bhuvanewar was adorned with some hundreds of temples, some dozen of which have been photographed, but hardly in sufficient detail to enable the student to classify them according to their dates. On the spot¹ it probably would be easy for any one trained to this class of study, and it would be a great gain if it were done. The group nearest in richness and interest is that at Khajurâho, mentioned above (p. 245); but that group belongs to an age just subsequent² to that of the Bhuvanewar group, and only enables us to see that some of the most elaborate of the Cuttack temples may extend to the year 1000 or thereabouts. It is to this date that I would ascribe the erection of the Raj Rani temple. The names of those of which I have photographs, with their approximate data, are given in the list at the end of this chapter; but I refrain from burdening the text with their unpronounceable names, as I despair, by any reasonable number of woodcuts, of illustrating their marvellous details in anything like a satisfactory manner.



235.
Plan of Raj Rani Temple.
(Compiled from a Plan by
Babu Rajendra, and cor-
rected from photographs.)
Scale 50 ft. to 1 in.

The Raj Rani temple, as will be seen from the woodcut (No. 235), is small; but the plan is arranged so as to give great variety and play of light and shade, and as the details are of the most exquisite beauty, it is one of the gems of Orissan art. The following woodcut (No. 236), without attempting to illustrate the art, is quoted as characteristic of the emblems of the Kesari line. Below the pillar are three kneeling elephants, over which domineer three lions, the emblems of the race. Above this a Nagni, or female Naga, with her seven-headed snake-hood, adorns the upper part of the pillar. They are to be found, generally in great numbers, in almost all the temples of the province. Over the doorway are the Nava

¹ It is to be hoped that Babu Rajendra's book may to some extent remedy this deficiency. In the part, however, now published, he does not promise that

this will be the case.

² Cunningham's 'Reports,' vol. ii. p. 416.

Graha, or nine planets, which are almost more universal, both in temples dedicated to Vishnu and in those belonging to the worship of Siva. Indeed, in so far as any external signs are concerned, there does not seem to be any means by which the temples of the two religions can be distinguished from one another. Throughout the province, from the time we first meet it, about A.D. 500, till it dies out about A.D. 1200, the style seems to be singularly uniform in its features, and it requires considerable familiarity with it to detect its gradual progress towards decay. Notwithstanding this, it is easy to perceive that there are two styles of architecture in Orissa, which ran side by side with one another during the whole course. The first is represented by the temples of Parasurameswara and Mukteswara (Woodcuts No. 230,



Doorway in Raj Rani Temple.
(From a Photograph.)

231); the second by the great temple (Woodcut No. 233). They are not antagonistic, but sister styles, and seem certainly to have had at least partially different origins. We can find affinities with that of the Mukteswara group in Dharwar and most parts of northern India: but I know of nothing exactly like the great temple anywhere else. It seems to be quite indigenous, and if not the most beautiful, it is the simplest and most majestic of the Indo-Aryan styles. It may look like riding a hobby to death, but I cannot help suspecting a wooden origin for it—the courses look so much more like carved logs of wood laid one upon another than courses of masonry, and the mode and extent to which they are carved certainly savours of the same material. There is a mosque built of Deodar pine in Kashmir, to be referred to hereafter, which certainly seems to favour this idea; but till we find some older temples than any yet discovered in Orissa this must remain in doubt. Meanwhile it may be well to point out that about one-half of the older temples in Orissa follow the type of the great temple, and one-half that of Mukteswara; but the two get confounded together in the 8th and 9th centuries, and are mixed

together into what may almost be called a new style in the Raj Rani and temples of the 10th and 11th centuries.

KANARUC.

With, perhaps, the single exception of the temple of Juganât at Puri, there is no temple in India better known and about which more has been written than the so-called Black Pagoda at Kanaruc: nor is there any one whose date and dedication is better known, if the literature on the subject could be depended upon. Stirling does not hesitate in asserting that the present edifice, "as is well known, was built by the Raja Langora Narsingh Deo, in A.D. 1241, under the superintendence of his minister Shibai Santra;"¹ and every one who has since written on the subject adopts this date without hesitation,² and the native records seem to confirm it. Complete as this evidence, at first sight, appears, I have no hesitation in putting it aside, for the simple reason that it seems impossible—after the erection of so degraded a specimen of the art as the temple of Puri (A.D. 1174)—the style ever could have reverted to anything so beautiful as this. In general design and detail it is so similar to the Jagamohan of the great temple at Bhuvaneswar that at first sight I should be inclined to place it in the same century; but the details of the tower exhibit a progress towards modern forms which is unmistakeable,³ and render a difference of date of two or possibly even three centuries more probable. Yet the only written authority I know of for such a date is that given by Abul Fazl. After describing the temple, and ascribing it to Raja Narsingh Deo, in A.D. 1241, with an amount of detail and degree of circumstantiality which has deceived every one, he quietly adds that it is said "to be a work of 730 years' antiquity."⁴ In other words, it was erected in A.D. 850 or A.D. 873, according to the date we assume for the composition of the *Ayeen Akbery*. If there were a king of that name among the *Rois fainéants* of the Kesari line, this would suffice; but no such name is found in the lists.⁵ This, however, is not final; for in an inscription on the Brahmaneswar temple the queen, who built it, mentions the names of her husband, Udyalaka, and six of his

¹ 'Asiatic Researches,' vol. xv. p. 327.

² Myself included in the number! but, as explained above, I had no knowledge of the style when I visited Orissa, and had no photographs to illustrate the architecture of temples to which I was not then allowed access.

³ When I visited Orissa in 1837 and sketched this temple, a great part of the tower was still standing. See 'Pictu-

resque Illustrations of Indian Architecture,' part iii. It has since fallen entirely, but whether from stress of weather or by aid from the Public Works Department is by no means clear.

⁴ 'Ayeen Akbery,' Gladwin's translation, vol. ii. p. 16.

⁵ Hunter's 'Orissa,' Appendix vii. p. 187, *et seq.*

ancestors ; but neither he nor any of them are to be found in the lists except the first, Janmejaya, and it is doubtful whether even he was a Kesari king or the hero of the 'Mahabharata.'¹ In all this uncertainty we have really nothing to guide us but the architecture, and its testimony is so distinct that it does not appear to me doubtful that this temple really belongs to the latter half of the 9th century.

Another point of interest connected with this temple is, that all authors, apparently following Abul Fazl, agree that it was like the temple of Marttand, in Kashmir (*ante*, p. 287), dedicated to the sun. I have never myself seen a Sun temple in India, and being entirely ignorant of the ritual of the sect, I would not wish to appear to dogmatise on the subject ; but I have already expressed my doubts as to the dedication of Marttand, and I may be allowed to repeat them here. The traces of Sun worship in Bengal are so slight that they have escaped me, as they have done the keen scrutiny of the late H. H. Wilson.²

In the Vedas it appears that Vishnu is called the Sun, or it may be the sun bears the name of Vishnu ;³ and this may account, perhaps, for the way in which the name has come to be applied to this temple, which differs in no other respect from the other temples of Vishnu found in Orissa. The architectural forms are identical ; they are adorned with the same symbols. The Nava Graha, or nine planets, adorn the lintel of this as of all the temples of the Kesari line. The seven-headed serpent-forms are found on every temple of the race, from the great one at Bhuvaneswar to this one, and it is only distinguishable from those of Siva by the obscenities that disfigure a part of its sculptures. This is, unfortunately only too common a characteristic of Vaishnava temples all over India, but is hardly, if ever, found in Saiva temples, and never was, so far as I know, a characteristic of the worship of the Sun god.

Architecturally, the great beauty of this temple arises from the form of the design of the roof of the Jagamohan, or porch—the only part now remaining. Both in dimensions and detail, it is extremely like that of the great temple at Bhuvaneswar, but it is here divided into three storeys instead of two, which is an immense improvement, and it rises at a more agreeable angle. The first and second storeys consist of six cornices each, the third of five only, as shown in the

¹ 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 557.

² 'Asiatic Researches,' vol. xvi. p. 25.

³ In his 'Antiquities of Orissa' (p. 151), Babu Rajendra sums up exhaustively the argument for and against Vishnu being considered the same as the Sun in the Vedas, and, on the whole, makes out a strong case in favour of the identifica-

tion. Even, however, if the case were much less strong than it appears to be, it by no means follows that what was only dimly shadowed forth in the Vedas may not have become an accepted fact in the Puranas, and an established dogma in Orissa in the 9th century, when this temple was erected.

diagram Woodcut No. 124. The two lower ones are carved with infinite beauty and variety on all their twelve faces, and the antefixæ at the angles and breaks are used with an elegance and judgment a true Yavana could hardly have surpassed. There is, so far as I know, no roof in India where the same play of light and shade is obtained with an equal amount of richness and constructive propriety as in this instance, nor one that sits so gracefully on the base that supports it.

Internally, the chamber is singularly plain, but presents some constructive peculiarities worthy of attention. On the floor it is about 40 ft. square, and the walls rise plain to about the same height. Here it begins to bracket inwards, till it contracts to about 20 ft., where it was ceiled with a flat stone roof, supported by wrought-iron beams—Stirling says nine, nearly 1 ft. square by 12 ft. to 18 ft. long.¹ My measurements made the section less—8 in. to 9 in., but the length greater, 23 ft.; and Babu Rajendra points out that one, 21 ft. long, has a square section of 8 in. at the end, but a depth of 11 in. in the centre,² showing a knowledge of the properties and strength of the material that is remarkable in a people who are now so utterly incapable of forging such masses. The iron pillar at Delhi (Woodcut No. 281) is even a more remarkable example than this, and no satisfactory explanation has yet been given as to the mode in which it was manufactured. Its object, however, is plain, while the employment of these beams here is a mystery. They were not wanted for strength, as the building is still firm after they have fallen, and so expensive a false ceiling was not wanted architecturally to roof so plain a chamber. It seems to be only another instance of that profusion of labour which the Hindus loved to lavish on the temples of their gods.

PURI.

When from the capital we turn to Puri, we find a state of affairs more altered than might be expected from the short space of time that had elapsed between the building of the Black Pagoda and the celebrated one now found there. It is true the dynasty had changed. In 1181, the Kesari Vansa, with their Saira worship, had been superseded by the Ganga Vansa, who were apparently as devoted followers of Vishnu; and they set to work at once to signalise their triumph by erecting the temple to Juganât, which has since acquired such a world-wide celebrity.

¹ 'Asiatic Researches,' vol. xv. p. 330.

² These discrepancies arise from the fact that the beams lie on the floor buried under the ruins of the stone roof they

once supported, and it is extremely difficult to get at them so as to obtain correct measurements.

It is not, of course, to be supposed that the kings of the Ganga line were the first to introduce the worship of Vishnu to Orissa. The whole traditions, as recorded by Stirling, contradict such an assumption, and the first temple erected on this spot to the deity is said to have been built by Yayati, the founder of the Kosari line.¹ He it was who recovered the sacred image of Juganât from the place where it had been buried 150 years before, on the invasion of the Yavanas, and a "new temple was erected by him on the site of the old one, which was found to be much dilapidated and overwhelmed with sand."² This, of course, was before the arrival of the Ayodhya Brahmans alluded to above, who, though they may have retained possession of the capital during the continuance of the dynasty, did not apparently interfere with the rival worship in the provinces.

It would indeed be contrary to all experience if, in a country where Buddhism once existed, those who were followers of that faith had not degenerated first into Jainism and then into Vishnuism. At Udayagiri we have absolute proof in the caves of the first transition, and that it continued there till the time when the Mahrattas erected the little temple on the southern peak. In like manner, there seems little doubt that the tooth relic was preserved at Puri till the invasion of the Yavanas, apparently, as before mentioned, to obtain possession of it. According to the Buddhist version, it was buried in the jungle, but dug up again shortly afterwards, and conveyed to Ceylon.³ According to the Brahmanical account, it was the image of Juganât, and not the tooth, that was hidden and recovered on the departure of the Yavanas, and then was enshrined at Juganât in a new temple on the sands. The tradition of a bone of Krishna being contained in the image⁴ is evidently only a Brahmanical form of Buddhist relic worship, and, as has been frequently suggested, the three images of Juganât, his brother Balbhadra, and the sister Subhadhra, are only the Buddhist trinity—Buddha, Dharma, Sanga—disguised to suit the altered condition of belief among the common people. The pilgrimage, the Rât Jutra, the suspension of caste prejudices, everything in fact at Puri, is redolent of Buddhism, but of Buddhism so degraded as hardly to be recognisable by those who know that faith only in its older and purer form.

The degradation of the faith, however, is hardly so remarkable as that of the style. Even Stirling, who was no captious critic, remarks that it seems unaccountable, in an age when the architects obviously possessed some taste and skill, and were in most cases particularly lavish in the use of sculptural ornament, so little pains

¹ 'Asiatic Researches,' vol. xv. p. 316.

² Loc. cit., p. 265.

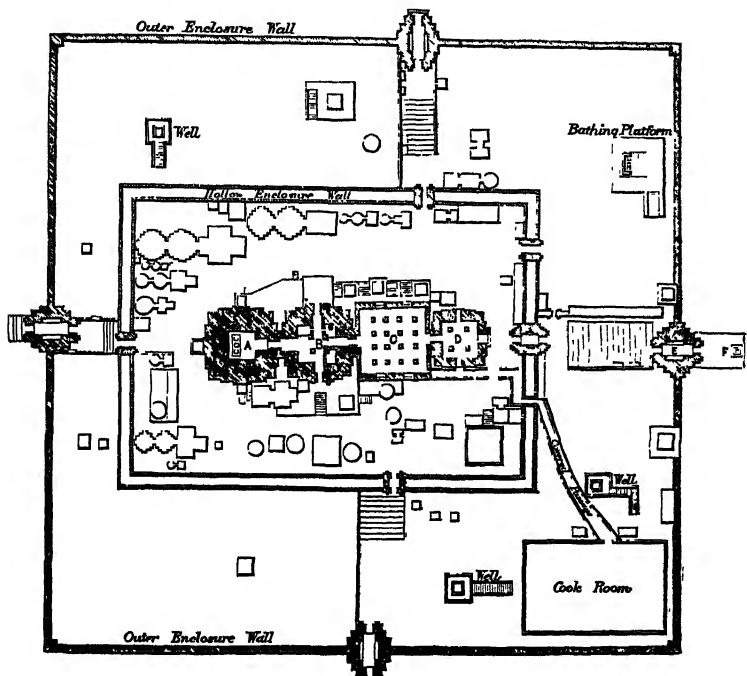
³ Tournour's abstract of the Dala-

wanso in the 'Journal of the Asiatic Society of Bengal,' vol. vi. p. 356, *et seqq.*

⁴ 'Asiatic Researches,' vol. xv. p. 320.

should have been taken with the decoration and finishing of this sacred and stupendous edifice.¹ It is not, however, only in the detail, but the outline, the proportions, and every arrangement of the temple, show that the art in this province at least had received a fatal downward impetus from which it never recovered.

As will be seen from the annexed plan² (Woodcut No. 237), this temple has a double enclosure, a thing otherwise unknown in the north. Externally it measures 670 ft. by 640 ft., and is surrounded by a wall 20 ft. to 30 ft. high, with four gates. The inner enclosure



Scale 200 ft⁶ to the Inch

237. Plan of Temple of Jaganât at Puri. (From a Plan by R. P. Mukerji.)

measures 420 ft. by 315 ft., and is enclosed by a double wall with four openings. Within this last stands the Bara Dewul, A, measuring 80 ft. across the centre, or 5 ft. more than the great temple at Bhuvanewar; with its porch or Jagamohan, B, it measures 155 ft. east and west, while the great tower rises to a height of 192 ft.³ Beyond

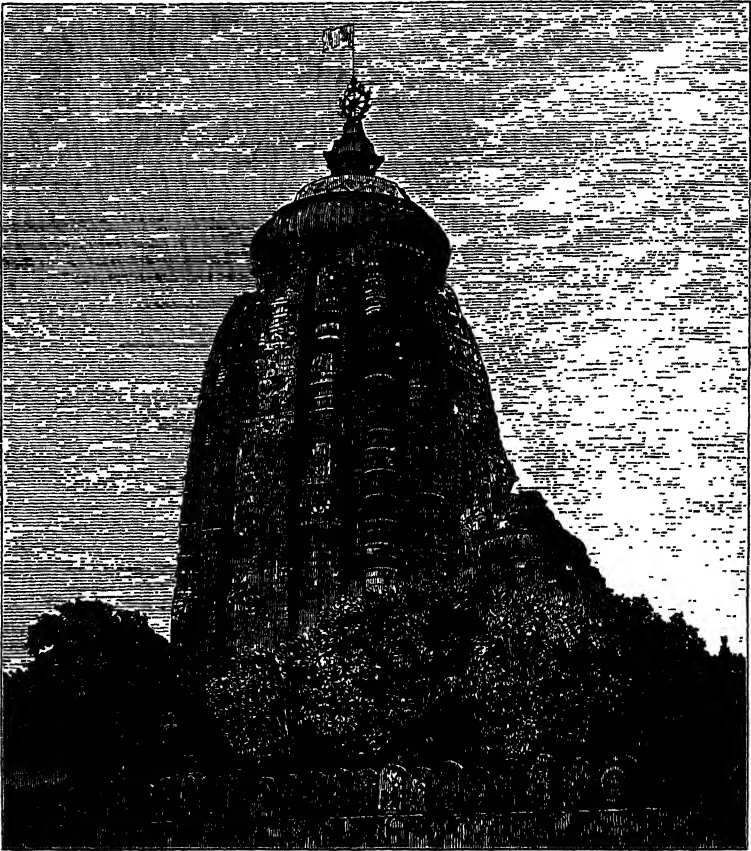
¹ 'Asiatic Researches,' vol. xv. p. 315.

² The plan is reduced from one to a scale of 40 feet to 1 in., made by an intelligent native assistant to the Public Works Department, named Radhica Pur-

sâd Mukerji, and is the only plan I ever found done by a native sufficiently correct to be used, except as a diagram, or after serious doctoring.

³ Hunter, 'Orissa,' vol. i. p. 128.

this two other porches were afterwards added, the Nat-mandir, C, and Bhog-mandir, D, making the whole length of the temple about 300 ft., or as nearly as may be the same as that at Bhuvanewar. Besides this there are, as in all great Hindu temples, numberless smaller shrines within the two enclosures; but, as in all instances in the north, they are kept subordinate to the principal one, which here towers supreme over all.



238.

View of Tower of Temple of Juganath. (From a Photograph.)

Except in its double enclosure, and a certain irregularity of plan, this temple does not differ materially in arrangement from the great ones at Bhuvanewar and elsewhere; but besides the absence of detail already remarked upon, the outline of its vimana is totally devoid either of that solemn solidity of the earlier examples, or the grace that characterised those subsequently erected; and when we add to this that whitewash and paint have done their worst to add vulgarity to forms already sufficiently ungraceful, it will easily be understood that

this, the most famous, is also the most disappointing of northern Hindu temples.¹ As may be seen from the preceding illustration (Woodcut No. 238), the parts are so nearly the same as those found in all the older temples at Bhuvaneswar, that the difference could hardly be expressed in words; even the woodcut, however, is sufficient to show how changed they are in effect, but the building itself should be seen fully to appreciate the degradation that has taken place.

JAJEPUR AND CUTTACK.

Jajepur, on the Byturni, was one of the old capitals of the province, and even now contains temples which, from the squareness of their forms, may be old, but, if so, they have been so completely disguised by a thick coating of plaster, that their carvings are entirely obliterated, and there is nothing by which their age can be determined. The place was long occupied by the Mahomedans, and the presence of a handsome mosque may account for the disappearance of some at least of the Hindu remains. There is one pillar, however, still standing, which deserves to be illustrated as one of the most pleasing examples of its class in India (Woodcut No. 239). Its proportions are beautiful, and its details in excellent taste; but the mouldings of the base, which are those on which the Hindus were accustomed to lavish the utmost care, have unfortunately been destroyed. Originally it is said to have supported a figure of Garuda—the Vahana of Vishnu—and a figure is pointed out as the identical one. It may be so, and if it is the case, the pillar is of the 12th or 13th century. This also seems to be the age of some remarkable pieces of sculpture which were discovered some years ago on the brink of the river, where they had apparently been hidden from Mahomedan bigotry. They are in

¹ News has just reached this country of a curious accident having happened in this temple. Just after the gods had been removed from their Sinhasan to take their annual excursion to the Gundicha Nâr, some stones of the roof fell in, and would have killed any attendants and smashed the gods had they not fortunately all been absent. Assuming the interior of the Bara Dewul to be as represented (Woodcut No. 124), it is not easy to see how this could have happened. But in the same woodcut the porch or Jagamohan of the Kanaruc pagoda is represented with a flat false roof, which has fallen, and now encumbers the floor of the apartment. That roof, however, was formed of stone laid

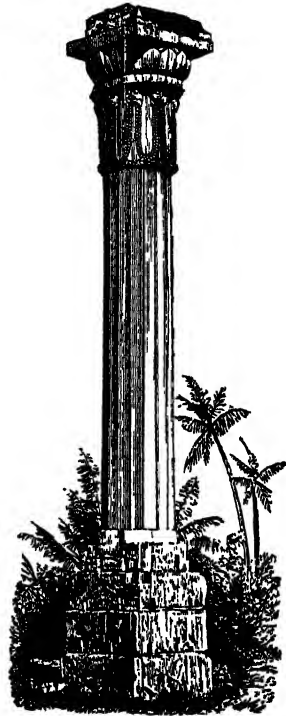
on iron beams, and looked as if it could only have been shaken down by an earthquake. I have little doubt that a similar false roof was formed some way up the tower over the altar at Puri, but formed probably of stone laid on wooden beams and either decay or the white ants having destroyed the timber, the stones have fallen as narrated.

A similar roof so supported on wooden beams still exists in the structural temple on the shore at Mahavellipore, and, I have no doubt, elsewhere, but it is almost impossible to get access to these cells when the gods are at home, and the places are so dark it is equally impossible to see, except when in ruins, how they were roofed.

quite a different style from anything at Bhuvanewar or Kanaruc, and probably more modern than anything at those places.

Cuttack became the capital of the country in A.D. 989-1006, when a certain Markut Kesari built a stone revêtement to protect the site from encroachment of the river.¹ It too, however, has suffered, first from the intolerant bigotry of the Moslem, and afterwards from the stolid indifference² of the British rulers, so that very little remains; but for this the nine-storeyed palace of Mukund Deo, the contemporary of Akbar, might still remain to us in such a state at least as to be intelligible. We hear so much, however, of these nine-storeyed palaces and viharas, that it may be worth while quoting Abul Fazl's description of this one, in order to enable us to understand some of the allusions and descriptions we afterwards may meet with:—"In Cuttack," he says, "there is a fine palace, built by Rajah Mukund Deo, consisting of nine storeys. The first storey is for elephants, camels, and horses; the second for artillery and military stores, where also are quarters for the guards and other attendants; the third is occupied by porters and watchmen; the fourth is appropriated for the several artificers; the kitchens make the fifth range; the sixth contains the Rajah's public apartments; the seventh is for the transaction of private business; the eighth is where the women reside; and the ninth is the Rajah's sleeping apartment. To the south," he adds, "of this palace is a very ancient Hindu temple."³

As Orissa at the period when this was written was practically a part of Akbar's kingdom, there seems little doubt that this description was furnished by some one who knew the place. There are seven-storeyed palaces at Jeypur and Bijapur still standing, which were erected about this date, and one of five storeys in Akbar's own palace at Futtehpore Sikri, but none, so far as I know, of nine



239. Hindu Pillar in Jaipur.
(From a Photograph.)

¹ 'Asiatic Researches,' vol. xv. p. 367. | 'Ayeen Akbery,' Gladwin's trans-
² Ibid., p. 395; Hunter's 'Orissa,' vol. i. p. 18. | lation, vol. ii. p. 18.
i. p. 266.

storeys, though I see no reason for doubting the correctness of the description of the one just quoted.

Although it thus consequently happens that we have no more means of ascertaining what the civil edifices of the Indo-Aryans of Orissa were like, than we have of those of the contemporary Dravidians, there is a group of engineering objects which throw some light on the arts of the period. As has been frequently stated above, the Hindus hate an arch, and never will use it except under compulsion. The Mahomedans taught them to get over their prejudices and employ the arch in their civil buildings in later times, but to



240.

Hindu Bridge at Cuttack. (From a Photograph.)

the present day they avoid it in their temples in so far as it is possible to do so. In Orissa, however, in the 13th century, they built numerous bridges in various parts of the province, but never employed a true arch in any of them. The Atarah Nullah bridge at Puri, built by Kebir Narsingh Deo, about 1250, has been drawn and described by Stirling, and is the finest in the province of those still in use. Between the abutments it is 275 ft. long, and with a roadway 35 ft. wide. That shown in the above woodcut (No. 240) is probably older, and certainly more picturesque, though constructed on the same identical plan. It may be unscientific, but many of

these old bridges are standing and in use, while many of those we have constructed out of the ruins of the temples and palaces have been swept away as if a curse were upon them.

CONCLUSION.

The above may be considered as a somewhat meagre account of one of the most complete and interesting styles of Indian architecture. It would, however, be impossible to do it justice without an amount of illustration incompatible with the scope of this work, and with details drawn on a larger scale than its pages admit of. It is to be hoped that Babu Rajendra's work may, to some extent, at least, supply this deficiency. The first volume can only, however, be considered as introductory, being wholly occupied with preliminary matters, and avoiding all dates or descriptions of particular buildings. The second, when it appears, may remedy this defect, and it is to be hoped will do so, as a good monograph of the Orissan style would convey a more correct idea of what Indian art really is than a similar account of any other style we are acquainted with in India. From the erection of the temple of Parasurameswara, A.D. 500, to that of Juganât at Puri, A.D. 1174, the style steadily progresses without any interruption or admixture of foreign elements, while the examples are so numerous that one might be found for every fifty years of the period—probably for every twenty—and we might thus have a chronometric scale of Hindu art during these seven centuries that would be invaluable for application to other places or styles. It is also in Orissa, if anywhere that we may hope to find the *incunabula* that will explain much that is now mysterious in the forms of the temples and the origin of many parts of their ornamentation. An examination, for instance, of a hundred or so of the ruined and half-ruined temples of the province would enable any competent person to say at once how far the theory above enunciated (Woodcut No. 124)—to account for the curved form of the towers—was or was not in accordance with the facts of the case, and, if opposed to them, what the true theory of the curved form really was. In like manner, it seems hardly doubtful that a careful examination of a great number of examples would reveal the origin of the amalaka crowning ornament. I feel absolutely convinced, as stated above, that it did not grow out of the berry of the *Phyllanthus emblica*, and am very doubtful if it had a vegetable origin at all. But no one yet has suggested any other theory which will bear examination, and it is only from the earliest temples themselves that any satisfactory answer can be expected.

It is not only, however, that these and many other technical questions will be answered when any competent person undertakes a

thorough examination of the ruins, but they will afford a picture of the civilization and of the arts and religion of an Indian community during seven centuries of isolation from external influences, such as can hardly be obtained from any other source. So far as we at present know, it is a singularly pleasing picture, and one that will well repay any pains that may be taken to present it to the English public in a complete and intelligible form.

TENTATIVE LIST OF DATES AND DIMENSIONS OF THE PRINCIPAL ORISSAN TEMPLES.

Dates.		External Dimensions of Towers.		Internal Dimensions of Cells.	
		ft.	ft.	ft.	ft.
500-600	Parasurameswara	20	20	11	9
	Mukteswara	14	14	6	6
600-700	Sari Dewala	24	22	12	12
	Moitre Serai .. .. .	..	..	..	..
657	Ananta Vasu Deva	26	26	16	14
	Bhuvaneswar	66	60	42	42
700-850	Sideswara .. .. .	..	..	..	..
	Vitala Devi .. .. .	..	..	..	..
	Markandeswara in Puri ... .. .	..	..	..	..
873	Brahmeswara .. .. .	..	..	..	..
	Kanaruc	60	60	40	40 (?)
900-1000	Kedareswar .. .. .	..	..	..	..
	Raj Rani	32	25	12	12
1104	Nat Mandir at Bhuvaneswar	..	..	..	..
1198	Juganât, Puri	73	73	29	29 ¹

¹ These dimensions, except those of Kanaruc, are taken from a table in Babu Rajendra's 'Antiquities of Orissa,' vol. i. p. 41, and are sufficient to give an idea of the relative size of the building. So far as I can make out they are taken from angle to angle of the towers, but as they all have projections on their faces,

when cubed, as is done in the table referred to, they are much too small. I may also observe that I know of no instance in which the two dimensions differ. The four faces are always, I believe, alike. The dates are my own; none are given, except for the great temple, in the Babu's first volume.

CHAPTER III.

WESTERN INDIA.

CONTENTS.

Dharwar—Brahmanical Rock-cut Temples.

DHARWAR.

IF the province of Orissa is interesting from the completeness and uniformity of its style of Indo-Aryan architecture, that of Dharwar, or, more correctly speaking of Maharashtra, is almost equally so from exactly the opposite conditions. In the western province, the Dravidian style struggles with the northern for supremacy during all the earlier stages of their growth, and the mode in which the one influenced the other will be one of the most interesting and instructive lessons we can learn from their study, when the materials exist for a thorough investigation of the architectural history of this province. In magnificence, however, the western can never pretend to rival the eastern province. There are more and far finer buildings in the one city of Bhuvanewar alone than in all the cities of Maharashtra put together, and the extreme elaboration of their details gives the Orissan examples a superiority that the western temples cannot pretend to rival.

Among the oldest and most characteristic of the Dharwar temples is that of Papanatha, at Purudkul, or Pittadkul, as it is now spelt. As will be seen from the plan of this temple given above (Woodcut No. 122, page 221), the cell, with its tower, has not the same predominating importance which it always had in Orissa; and instead of a mere vestibule it has a four-pillared porch, which would in itself be sufficient to form a complete temple on the eastern side of India. Beyond this, however, is the great porch, Mantapa, or Jagamohan—square, as usual, but here it possesses sixteen pillars, in four groups, instead of the astylar arrangements so common in the east. It is, in fact, a copy, with very slight alterations, of the plan of the great Saiva temple at the same place (Woodcut No. 189), or the Kylas at Ellora (Woodcut No. 186). These, with others recently brought to light, form a group of early temples wholly Dravidian in style, but having no affinity, except in plan, with the Temple of

Papanatha, which is as essentially Indo-Aryan in all its architectural arrangements. This, in fact, may be looked upon as the characteristic difference between the styles of Dharwar and Orissa. The western style, from its proximity to the Dravidian and admixture with it, in fact, used pillars freely and with effect whenever wanted; while their use in Orissa is almost unknown in the best ages of the style, and their introduction, as it took place there, showed only too



241.

View of Temple of Papanatha at Pittadkul. (From a Photograph.)

clearly the necessity that had arisen in the decay of the style, to supply with foreign forms the want of originality of invention.

The external effect of the building may be judged of from the above woodcut (No. 241). The outline of the tower is not unlike that of the Parasurameswara temple at Bhuvanewar, with which it was probably contemporary—circa A.D. 500—but the central belt is more pronounced, and always apparently was on the west side of India. It will also be observed in this tower that every third course has on the angle a form which has just been described as an amalaka in speaking of the crowning members of Orissan temples. Here it looks

as if the two intermediate courses simulated roofs, or a roof in two storeys, and then this crowning member was introduced, and the same thing repeated over and over again till the requisite height was obtained. In the Parasurameswara there are three intermediate courses (Woodcut No. 230); in the great tower at Bhuvaneswar, five; and in the more modern temples they disappear from the angles, but are supplied by the miniature temple-forms applied to the sides. In the temple at Buddh Gaya the same form occurs (Woodcut No. 16) on the angle of each storey; but there it looks more like the capital of a pillar, which, in fact, I believe to be its real original. But from whatever form derived, this repetition on the angles is in the best possible taste; the eye is led upwards by it, and is prepared for the crowning member, which is thus no longer isolated and alone, but a part of a complete design.

The frequency of the repetition of this ornament is, so far as is now known, no bad test of the age of a temple. If an example were found where every alternate course was an amalaka, it probably would be older than any temple we have yet known. It would then represent a series of roofs, five, seven, or nine storeys, built over one another. It had, however, passed into conventionalities before we meet with it.

Whenever the temples of this district are thoroughly investigated, they will, no doubt, throw immense light on the early history of the style.¹ As the case now stands, however, the principal interest centres in the caves of Badami, which being the only Brahmanical caves known that have positive dates upon them, they give us a fixed point from which to reason in respect of other series such as we have never had before. For the present, they must make way for other examples better known and of more general architectural interest.

BRAHMANICAL ROCK-CUT TEMPLES.

Although the structural temples of the Badami group² in Dharwar are of such extreme interest, as has been pointed out above, they are surpassed in importance, for our present purposes at least, by the rock-cut examples.

At Badami there are three caves, not of any great dimensions,

¹ The two works on this subject are the 'Architectural History of Dharwar and Mysore,' fol., 100 plates, Murray, 1866, and Burgess's 'Report on the Belgam and Kuladgi Districts,' 1874. Considering the time available and the means at his disposal, Mr. Burgess did wonders, but it is no dispraise to say that he has not, nor could any man in his place, exhaust so vast a subject.

² For architectural purposes the three places may be considered as one. Aiwulli is five or six miles north of Badami, and Purudkul or Pittadkul as far south. Ten miles covers the whole, which must have been in the 6th or 7th century a place of great importance—possibly Watipipura, the capital of the Chalukyas in the 5th or 6th century. See 'Journal of the Royal Asiatic Society,' vol. iv. p. 9.

but of singular interest from their architectural details and sculptures, and more so from the fact that one of them, No. 3, contains an inscription with an undoubted date upon it. There are, as pointed out above, innumerable Buddhist inscriptions on the western caves, but none with dates from any well-ascertained era, and none, unfortunately, of the Brahmanical caves at Ellora or elsewhere have inscriptions that can be called integral, and not one certainly with a date on it. The consequence is, that the only mode by which their ages could be approximated was by arranging them in sequences, according to our empirical or real knowledge of the history of the period during which they were supposed to have been excavated. At Ellora, for instance, it was assumed that the Buddhist preceded the Brahmanical excavations, and that these were succeeded by the Jaina; and various local and architectural peculiarities rendered this hypothesis extremely probable. Arguing on this basis, it was found that the one chaitya cave there, the Viswakarma, was nearly identical in style with the last of the four chaityas at Ajunta (No. 26), and that cave, for reasons given above, was placed at the end of the 6th century, say A.D. 600. The caves next it were assumed to occupy the 7th century, thus leading on to the Rameswara group, about A.D. 700, and the Jaina group would then have occupied the next century. The age of the Kylas or Dravidian group, being exceptional, could only be determined by extraneous evidence, and, as already pointed out, from its extreme similarity with the great temple at Pittadkul, belongs almost certainly to the 8th century; and from a similar chain of reasoning the Jaina group is brought back to about the same age, or rather earlier, say A.D. 650.

The inscription on the No. 3 cave at Badami is dated in the twelfth year of the reign of a well-known king, Mangaliswara, in the 500th year after the inauguration of the Saka king, or in 79; the date therefore is A.D. 579. Admitting, which I think its architecture renders nearly certain, that it is the earliest of the three, still they are so like one another, that the latest must be assumed to have been excavated within the limits of the next century, say A.D. 575-700. Comparing the architecture of this group with that known as the central or Rameswara group at Ellora, it is so nearly identical, that though it may be slightly more modern, it can hardly now be doubted they too, including perhaps the cave known as the Ashes of Ravana, must have been excavated in the 7th century. Instead, therefore, of the sequence formerly adopted, we are forced to fall back on that marvellous picture of religious toleration described by the Chinese Pilgrim as exhibited at Allahabad in the year A.D. 643. On that occasion the King Siladitya distributed alms or gifts to 10,000 priests (*religieux*), the first day in honour of Buddha, the second of Aditya the Sun (Vishnu?), and the third in honour of Iswara or

Siva;¹ and the eighteen kings who assisted at this splendid quinquennial festival seem promiscuously to have honoured equally these three divinities. With this toleration at head-quarters, we ought not to be surprised if we find the temples of the three religions overlapping one another to some extent.

The truth of the matter is, that one of the greatest difficulties an antiquary experiences before the 8th century, is to ascertain to what divinity any temple or a cave is dedicated. In the three caves, for instance, at Badami, the sculptures are wholly Vaishnava, and no one would doubt that they were dedicated to that deity, but in the sanctuaries of all is the lingam or emblem of Siva. It has been suggested that this may have been an afterthought, but if so the cave must have been without meaning. There is no sinhasan or throne on which an image of a deity could be placed, nor is the cell large enough for that purpose.

Unfortunately there are no Buddhist buildings or caves so far south as Badami, and we are consequently deprived of that means for comparison; and before anything very definite can be laid down, it will require that some one familiar with the subject should go over the whole of the western caves, and institute a rigid comparison of their details. Meanwhile, however, the result of the translations of the inscriptions gathered by Mr. Burgess, and of his plans and views,² is that we must compress our history of the western caves within narrower limits than originally seemed necessary.³ The buildings in the Dharwar district seem all to be comprised between the years 500 and 750 A.D., with probably a slight extension either way, and those at Ellora being certainly synchronous, must equally be limited to the same period of time,

Pending a more complete investigation, which I hope may be undertaken before long, I would propose the following as a tentative chronology of the far-famed series of caves at Ellora:—

Buddhist:—Viswakarma to Das Avatara	A.D. 500-600
Jaina:—Indra, Juganât, Subhas, &c.	550-650
Hindu:—Rameswara to Dhumnar Lena	600-750
Dravidian:—Kylas	725-800

The cave at Elephanta follows of course the date here given for the Dhumnar Lena, and must thus date after the middle of the 8th century.⁴

¹ 'Histoire de Hiouen Thsang,' p. 255; 'Vie et Voyages,' vol. i. p. 280.

² 'Report on the District of Belgam and Kuladgi,' 1874

³ When I originally wrote on the subject I thought I had the 9th and 10th cen-

turies at my disposal. It now appears they must be blotted out as non-existent for any historical or artistic purpose.

⁴ This is the date given by Mr. Burgess in his description in 'The Caves at Elephanta,' Bombay, 1871, p. 5.

These dated caves and buildings have also rendered another service to the science of archaeology, inasmuch as they enable us to state with confidence that the principal caves at Mahavellipore must be circumscribed within the same limits. The architecture there being so lean and poor, is most misleading, but, as hinted above, I believe it arose from the fact that it was Dravidian, and copied literally from structural buildings, by people who had not the long experience of the Buddhists in cave architecture to guide them, for there seems to have been no Buddhists so far south. But be that as it may, a comparison of the Hindu sculptures at Badami with those of Ellora on the one hand, and Mahavellipore on the other, renders it almost absolutely certain that they were practically contemporary. The famous bas-relief of Durga, on her lion, slaying Mahasura, the Minotaur,¹ is earlier than one very similar to it at Ellora; and one, the Virataruqa,² is later by probably a century than the sculpture of the same subject in cave 3 at Badami.³ Some of the other bas-reliefs are later, some earlier, than those representing similar subjects in the three series, but it seems now impossible to get over the fact that they are practically synchronous. Even the great bas-relief, which I was inclined to assign to a more modern period, probably belongs to the 7th or 8th century. The great Naga king, whom all the world are there worshipping, is represented as a man whose head is shaded by a seven-headed serpent-hood, but also with a serpent-body from the waist downwards. That form was not known in the older Buddhist sculptures, but has now been found on all the Orissan temples (for instance Woodcut No. 236), and nearly as frequently at Badami.⁴ This difficulty being removed, there seems no reason why this gigantic sculpture should not take the place, which its state of execution would otherwise assign to it—say A.D. 700—as a mean date, subject to subsequent adjustment.

In a general work like the present it is of course impossible to illustrate so extensive a group as that of the Brahmanical caves to such an extent as to render their history or affinities intelligible to those who have not by other means become familiar with the subject. Fortunately, however, in this instance the materials exist by which any one may attain the desired information with very little difficulty. Daniell's drawings—or rather Mr. Wales'—made in 1795, have long made the public acquainted with the principal caves at Ellora; Sir Charles Malet's paper in the sixth volume of the 'Asiatic Researches'; Seely's 'Wonders of Ellora,' published in 1820, and numerous other works, with the photographs now available, supply nearly all that can be desired in that direction. The same may be said of Elephanta,

¹ 'Transactions of the Royal Asiatic Society,' vol. ii. pl. 4.

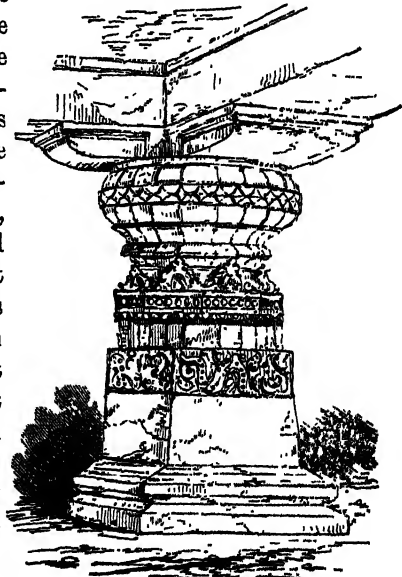
² Loc. cit., pl. 6.

³ Burgess, 'Report on Belgam,' &c. pl. 31.

⁴ Loc. cit., pls. 20, 23, 40.

which has been exhaustively treated by Mr. Burgess in the work above referred to. Chambers' paper in the second volume of the 'Transactions of the Royal Asiatic Society,' supplies, with Dr. Hunter's photographs, a vast amount of information regarding the Mahavellipore antiquities; and Mr. Burgess's recent report on the Dharwar caves completes, to a great extent, the information wanted to understand the peculiarities of the group. Notwithstanding this, it is well worthy of a monograph, inasmuch as it affords the only representation of the art and mythology of the Hindus on the revival of their religion, which was commenced by the Guptas A.D. 318-465, but really inaugurated by the great Vicramaditya, A.D. 495-530, and which, when once started, continued to flourish till the great collapse in the 8th century.

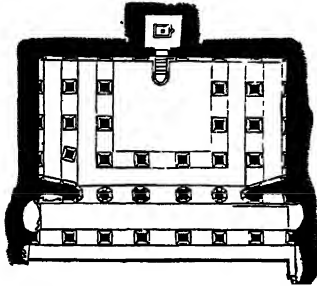
After all, however, the subject is one more suited to the purposes of the mythologist and the sculptor than to the architect. Like all rock-cut examples, except the Dravidian, the caves have the intolerable defect of having no exteriors, and consequently no external architectural form. The only parts of them which strictly belong to architectural art are their pillars, and though a series of them would be interesting, they vary so much, from the nature of the material in which they are carved, and from local circumstances, that they do not possess the same historical significance that external forms would afford. Such a pillar, for instance, as this one from the cave called Lanka, on the side of the pit in which the Kylas stands (Woodcut No. 242), though in exquisite taste as a rock-cut example, where the utmost strength is apparently required to support the mass of rock above, does not afford any points of comparison with structural examples of the same age. In a building it would be cumbersome and absurd; under a mass of rock it is elegant and appropriate.



Pillar in Kylas, Ellora.
(From a Drawing by the Author.)

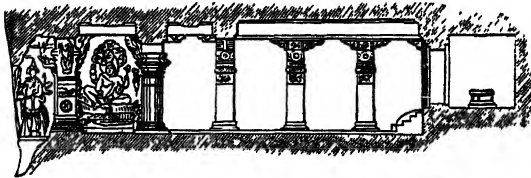
The pillars in the caves at Mahavellipore fail from the opposite fault: they retain their structural form, though used in the rock, and look frail and weak in consequence; but while this diversity in practice prevailed, it prevents their use as a chronometric

scale being appreciated, as it would be if the practice had been uniform. As, however, No. 3 at Badami is a cave with a positive date, A.D. 579, it may be well to give a plan and section (Woodcuts Nos. 243 and 244) to illustrate its peculiarities, so as to enable a comparison to be made between it and other examples. Its details will be found fully illustrated in Mr. Burgess's report.



243. Plan of Cave No. 3, Badami. (From a Plan by Mr. Burgess.) Scale 50 ft. to 1 in.

Though not one of the largest, it is still a fine cave, its verandah measuring 70 ft., with a depth of 50 ft., beyond which is a simple plain cell, containing the lingam. At one end of the verandah is the Narasingha Avatar; at the other end Vishnu seated on the five-headed serpent Ananta. The front pillars have each three brackets, of very wooden design, all of which are ornamented by two or three figures, generally a male and female, with a child



244. Section of Cave No. 3, Badami. (From a Drawing by Mr. Burgess) Scale 25 ft. to 1 in.

or dwarf—all of considerable beauty and delicacy of execution. The inner pillars are varied, and more architectural in their forms, but in the best style of Hindu art.

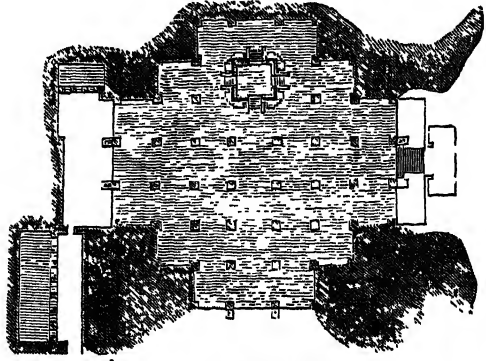
Compared with the style of art found at Amravati, on the opposite coast, it is curious to observe how nearly Buddha, seated on the many-headed Naga,¹ resembles Vishnu on Ananta in the last woodcut, and though the religion is changed, the art has hardly altered to such an extent as might be expected, considering that two centuries had probably elapsed between the execution of these two bas-reliefs. The change of religion, however, is complete, for though Buddha does appear at Badami, it is in the very subordinate position of the ninth Avatar of Vishnu.²

Sometimes the Hindus successfully conquered one of the main difficulties of cave architecture by excavating them on the spur of a

¹ 'Tread and Serpent Worship,' pl. 76.

² Burgess, 'Report on Belgam and Kuladji,' pl. 81.

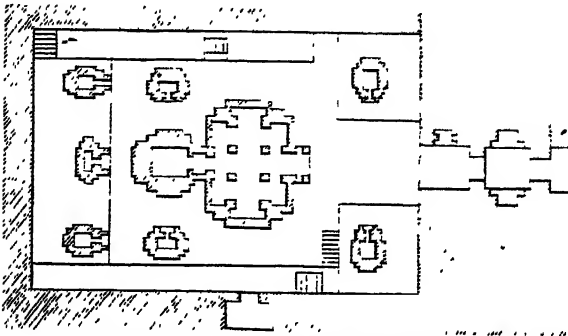
hill, as at the Dhumnar Lena at Ellora, or by surrounding them by courts, as at Elephanta; so that light was introduced on three sides instead of only one, as was too often the case both with Buddhist and Hindu excavations. These two, though probably among the last, are certainly the finest Hindu excavations existing, if looked at from an architectural point of view. The Ellora example is the larger and finer, measuring 150 ft. each way (Woodcut No. 245). That at Elephanta, though extremely similar in general arrangement, is less regular in plan, and also somewhat smaller, measuring only 130 ft. by 120 ft. It is easy to see that if these temples stood in the open they would only be porches, like that at Baillūr



245. Dhumnar Lena Cave at Ellora.
(From Daniell's 'Views in Hindostan'.
Scale 100 ft. to 1 in.)

(Woodcut No 221), and numberless other examples, which are found everywhere: but the necessities of rock-cut architecture required that the cella should be placed inside the mantapa, or porch, instead of externally to it, as was always the case in structural examples. This, perhaps, was hardly to be regretted; but it shows how little the practice of cutting temples in the rock was suited to the temple-forms of the Hindus, and we need not, therefore, feel surprised how readily they abandoned it when any idea of rivalling the Buddhists had ceased to prompt their efforts in this direction.

So far as I know, there is only one example where the Indo-Aryan architects attempted to rival the Dravidian in producing a monolithic exterior. It is at a place called Dhumnar, in Rajputana, where, as already mentioned (*ante*, p. 162), there is an extensive series of late Buddhist excavations. In order to mark their triumph over that fallen faith, the Hindus, apparently in the 8th century, drove an open cutting into the side of the hill, till they came to a part high enough for their purpose. Here they enlarged this cutting into a pit 105 ft. by 70 ft., leaving a temple of very elegant architecture standing in the centre, with seven small cells surrounding it, precisely as was done in the case of the Kylas at Ellora. The effect, however, can hardly be said to be pleasing (Woodcut No. 246). A temple standing in a pit is always an anomaly, but in this instance it is valuable as an unaltered example of the style, and as showing how small shrines—which have too often disappeared—were originally



246. Rock-cut Temple at Dhumnar. (From a plan by Gen. Cunningham.) Scale 50 ft. to 1 in.

grouped round the greater shrines. The value of this characteristic we shall be better able to appreciate when we come to describe the temples at Brambanam and other places in Java. When the Jains adopted the architecture of the Buddhists, they filled their residential cells with images, and made them into little temples, and the Hindus seem to some extent to have adopted the same practice as here exemplified, but never carried it to the same extent.

With a sufficient number of examples, it would be easy to trace the rise and fall of this cellular system, and few things would be more interesting; for now that we find it in full force in the Buddhist monasteries at Gandhara (*ante*, p. 171), it would be most important to be able to say exactly when the monk made way to the image. In India Proper there is no instance of this being done in



247. Saiva Temple near Poonah. (From a Sketch by Daniell.)

Buddhist times, or before A.D. 650, and hitherto we have been in the habit of considering it a purely Jaina arrangement. This must now be modified, but the question still remains—to what extent should this be done?

One more illustration must conclude what we have at present to say of Hindu rock-cut temples. It is found near Poonah, and is very little known, though much more appropriate to cave architecture than most examples of its class. The temple itself is a simple pillared hall, with apparently ten pillars in front, and probably had originally a structural sikra built on the upper plateau to mark the position of the sanctuary. The most original part of it, however, is the Nundi pavilion, which stands in the courtyard in front of the temple (Woodcut No. 247). It is circular in plan, and its roof—which is a great slab of rock—is supported by, apparently, sixteen square pillars of very simple form. Altogether it is as appropriate a bit of design as is to be found in Hindu cave architecture. It has, however, the defect only too common in those Hindu excavations—that, being in a pit, it can be looked down upon; which is a test very few buildings can stand, and to which none ought to be exposed.

CHAPTER IV.

CENTRAL AND NORTHERN INDIA.

CONTENTS.

Temples at Gualior, Khajurâho, Udaipur, Benares, Bindrabun, Kantonuggur, Amritsur.

THERE are certainly more than one hundred temples in Central and Northern India which are well worthy of being described in detail, and, if described and illustrated, would convey a wonderful impression of the fertility in invention of the Hindu mind and of the elegance with which it was capable of expressing itself. None of these temples can make the smallest pretension to rival the great southern examples in scale; they are all, indeed, smaller even than the greater of Orissan examples; and while some of them surpass the Orissan temples in elegance of form, many rival them in the profuse elaboration of minute ornamental details.

None of these temples—none, at least, that are now complete—seem to be of any great antiquity. At Erun, in the Saugor territory, are some fragments of columns, and several sculptures that seem to belong to the flourishing age of the Guptas, say about A.D. 450; and in the Mokundra Pass there are the remains of a choultrie that may be as old, or older, but it is a mere fragment,¹ and has no inscription upon it.

Among the more complete examples, the oldest I know of, and consequently the most beautiful, is the porch or temple at Chandravati, near Jahra Puttun, in Rajputana. In its neighbourhood Colonel Tod² found an inscription, dated A.D. 691,³ which at one time I thought might have been taken from this temple, and consequently might give its date, which would fairly agree with the style,³ judged from that of some of the caves at Ellora, which it very much resembles.

¹ A view of this was published in my 'Picturesque Illustrations of Indian Architecture,' pl. 5.

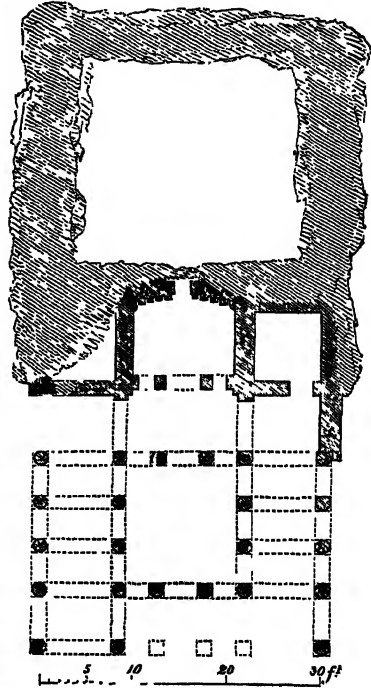
² Tod's 'Annals of Rajastan,' vol. ii. p. 734.

³ 'Picturesque Illustrations of Ancient Architecture in Hindostan,' pl. 6, with

description. Gen. Cunningham ('Archæological Reports,' vol. ii. p. 264) agrees with me as to the date, but inadvertently adds a scale to his plan which makes the building ten times larger than I made it, or than it really is.

As recent discoveries, however, have forced us to carry their dates further back by at least a century, it is probable that this too must go back to about the year 600, or thereabouts. Indeed, with the Chaõri in the Mokundra Pass, and the pillars at Erun, this Chandravati fragment completes the list of all we at present can feel sure of having been erected before the dark ages. There may be others, and, if so, it would be well they were examined, for this is certainly one of the most elegant specimens of architecture in India (Woodcut No. 248). It has not the poetry of arrangement of the Jaina octagonal domes, but it approaches very nearly to them by the large square space in the centre, which was covered by the most elegantly designed and most exquisitely carved roof known to exist anywhere. Its arrangement is evidently borrowed from that of Buddhist viharas, and it differs from them in style because their interiors were always plastered and painted; here, on the contrary, everything is honestly carved in stone.

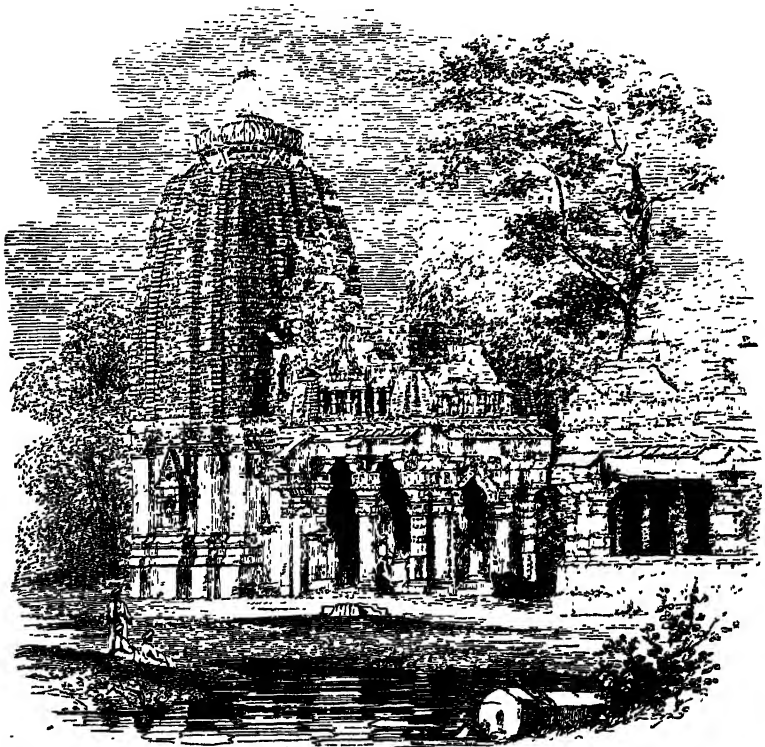
Leaving these fragments, one of the oldest, and certainly one of the most perfect, in Central India is the now desecrated temple at Barroli, situated in a wild and romantic spot, not far from the falls of the Chumbul, whose distant roar in the still night is the only sound that breaks the silence of the solitude around them. The principal temple, represented in the Woodcut No. 249, may probably be added to the list of buildings enumerated above as erected before 750 A.D. It certainly is at least a century more modern than that at Chandravati, and, pending a more precise determination, may be ascribed to the 8th or 9th century, and is one of the few of that age now known which were originally dedicated to Siva. Its general outline is identical with that of the contemporary Orissan



248. Temple at Chandravati.

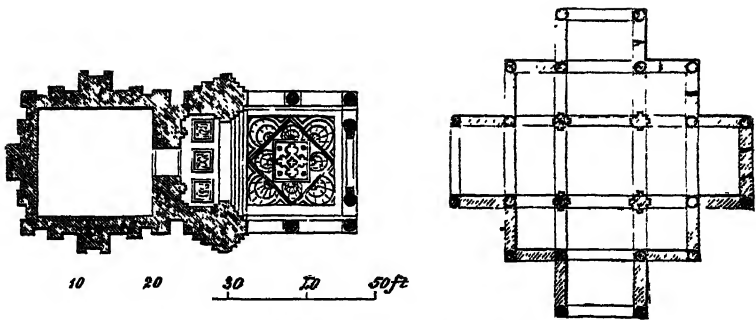
¹ Tod (loc. cit.) gives several plates of the details of the porch by a native artist—fairly well drawn, but wanting shadow to render them intelligible.

temples. But instead of the astylar enclosed porch, or *prabhavali*, it has a pillared portico of great elegance, whose roof reaches half-way



249.

Temple at Barrolli. (From a Drawing by the Author.)



Plan of Temple at Barrolli. (From Drawings by the Author.)

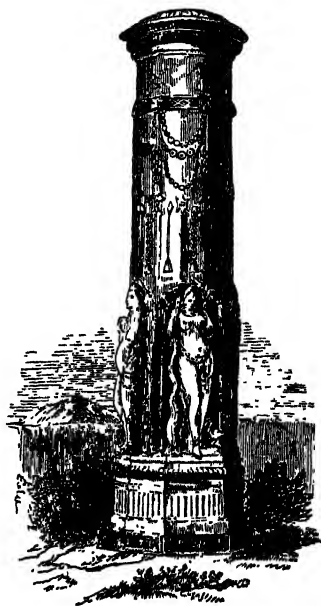
up the temple, and is sculptured with a richness and complexity of design almost unrivalled, even in those days of patient prodigality of labour. It will be observed in the plan (Woodcut No. 250) that

the dimensions are remarkably small, and the temple is barely 60 ft. high, so that its merit consists entirely in its shape and proportions, and in the elegance and profusion of the ornament that covers it.

In front of the temple is a detached porch, here called a Chaöri, or nuptial hall (the same word, I believe, as Choultrie in the south), in which tradition records the marriage of a Huna (Hun) prince to a Rajputni bride, for which purpose it is said to have been erected;¹ but whether this is so or not, it is one of the finest examples of such detached halls known in the north. We miss here the octagonal dome of the Jains, which would have given elegance and relief to its ceiling, though the variety in the spacing of the columns has been attained by a different process. The dome was seldom if ever employed in Hindu architecture, but they seem to have attempted to gain sufficient relief to their otherwise monotonous arrangement of columns by breaking up the external outline of the plan of the mantapa, and by ranging the aisles diagonally across the building, instead of placing them parallel to the sides.

The other two temples here are somewhat taller and more pointed in their form, and are consequently either more modern in date, or if of the same age—which may possibly be the case—would bring the date of the whole group down to the 10th century, which, after all, may be their true date, though I am at present inclined to think the more ancient date more consistent with our present knowledge.

A little way from the great temple are two pillars, one of which is here represented (Woodcut No. 251). They evidently supported one of those torans, or triumphal archways, which succeeded the gateways of the Buddhist topes, and form frequently a very pleasing adjunct to Hindu temples. They are, however, frail edifices at best, and easily overthrown, wherever the bigotry of the Moslems came into play.



251. Pillar in Barroli.
(From a Plate in 'Tod's 'Annals of Rajastan'.')

¹ Tod's 'Annals of Rajastan,' vol. ii. p. 712.

GUALIOR.

One temple, existing in the fortress of Gualior, has been already described under the title of the Jaina Temple (*ante*, p. 244), though whether it is Jaina or Vaishnava is by no means easily determined. At the same place there is another, bearing the not very dignified name of the Teli ka Mandir, or Oilman's Temple (Woodcut No. 252). It is a square of 60 ft. each way, with a portico on the east projecting about 11 ft. Unlike the other temples we have been describing, it does not terminate upwards in a pyramid, nor is it crowned by an amalaka, but in a ridge of about 30 ft. in extent, which may originally have had three amalakas upon it. I cannot help believing that this form of temple was once more common than we now find it. There are several examples of it at Mahavellipore (Woodcut Nos. 181, 182), evidently copied from a form common among the Buddhists, and one very beautiful example is found at Bhuvaneswar,¹ there called Kapila Devi, and dedicated to Siva. The Teli ka Mandir was originally dedicated to Vishnu, but afterwards converted to the worship of Siva. There is no inscription or any tradition from which its date can be gathered, but on the whole I am inclined to place it in the 10th or 11th century.

KHAJURÂHO.

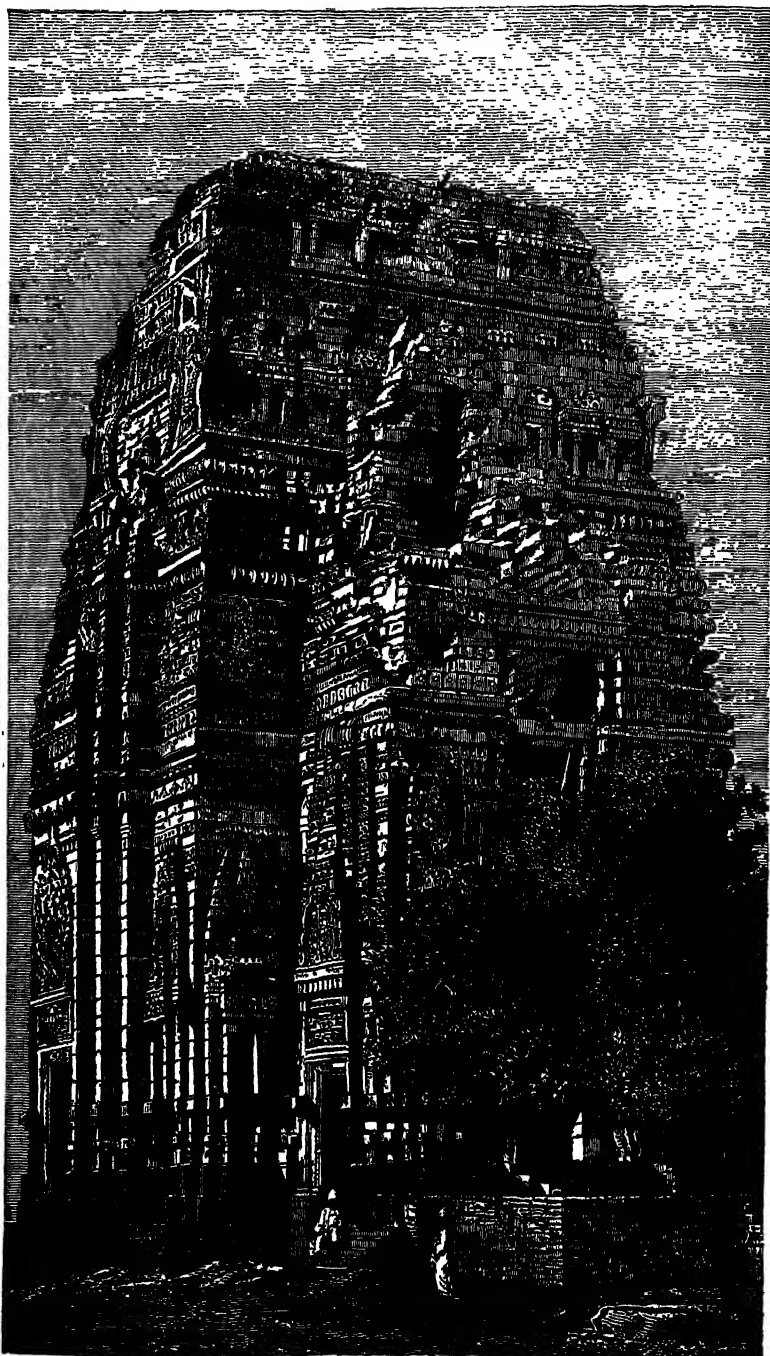
As mentioned above, the finest and most extensive group of temples belonging to the northern or Indo-Aryan style of architecture is that gathered round the great temple at Bhuvaneswar. They are also the most interesting historically, inasmuch as their dates extend through five or six centuries, and they alone consequently enable us to bridge over the dark ages of Indian art. From its remote situation, Orissa seems to have escaped, to a great extent at least, from the troubles that agitated northern and western India during the 8th and 9th centuries; and though from this cause we can find nothing in Central India to fill up the gap between Chandravati and Gualior, in Orissa the series is complete, and, if properly examined and described, would afford a consecutive history of the style from say 500 to 1100 or 1200 A.D.

Next in interest and extent to the Bhuvaneswar group is that at Khajurâho,² in Bundelcund, as before mentioned (p. 245). At

¹ A view of this temple will be found in my 'Picturesque Illustrations of Indian Architecture,' pl. 4.

² We are indebted to Gen. Cunning-

ham for almost all we know about this place, and it is from his 'Reports' and photographs that the following account has been compiled.



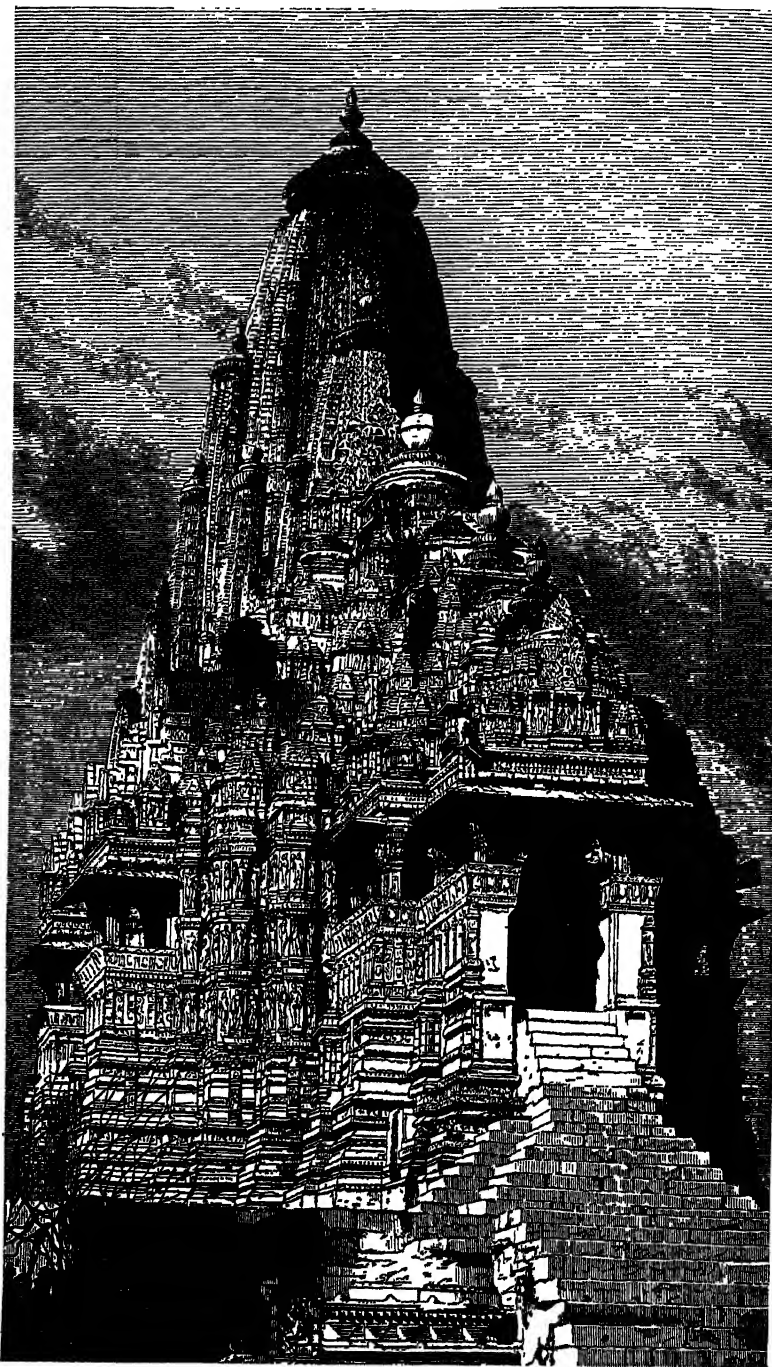
Teli ka Mandir, Gwalior. (From a Photograph.)

this place there are now to be found some thirty important temples, all of which, with the exception of the Chaonsat Jogini and the Ganthai, described when treating of Jaina architecture, are of the same or nearly the same age. Nor is it difficult, from their style and from the inscriptions gathered by General Cunningham, to see what that age was. The inscriptions range from A.D. 954 to A.D. 1001; and though it is not clear to what particular temple they apply, we shall not probably err much if we assign the whole twenty-eight temples he enumerates to the century beginning 950 and ending 1050, with a margin of a few years either way. What renders this group more than usually interesting is, that the Khajurâho temples are nearly equally divided between the three great Indian religions: one-third being Jaina, one-third Vaishnava, and the remainder Saiva; and all being contemporary, it conveys an impression of toleration we were hardly prepared for after the struggles of the preceding centuries, though it might have been expected three centuries earlier.

A curious result of this toleration or community of feeling is, that the architecture of all the three groups is so similar that, looking to it alone, no one could say to which of the three religions any particular temple belonged. It is only when their sculptures are examined that their original destination becomes apparent, and even then there are anomalies which it is difficult to explain. A portion, for instance, of the sculptures of the principal Saiva temple—the Kandarya Mahadeo—are of a grossly indecent character;¹ the only instance, so far as I know, of anything of the sort being found in a Saiva temple, that bad pre-eminence being reserved to temples belonging to the worshippers of Vishnu. It is possible that it may originally have belonged to the latter sect; but, taking all the circumstances into consideration, this is most unlikely, and the fact must be added to many others to prove how mixed together the various sects were even at that time, and how little antagonistic they then were to each other.

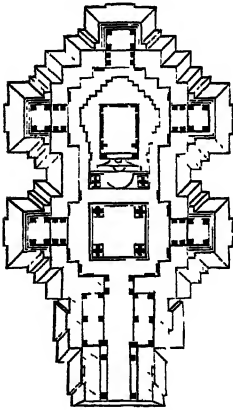
The general character of these temples may be gathered from the annexed representation (Woodcut No. 253) of the principal Saiva temple, the Kandarya Mahadeo. As will be seen from the plan (Woodcut No. 254), it is 109 ft. in length, by 60 ft. in breadth over all, and externally is 116 ft. above the ground, and 88 ft. above its own floor. Its basement, or perpendicular part, is, like all the great temples here, surrounded by three rows of sculptured figures. General Cunningham counted 872 statues on and in this temple, ranging from 2½ ft. to 3 ft. in height, or about half life-size, and they are mixed up with a profusion of vegetable forms and conventional details which defy description. The vimana, or tower, it will be observed, is built

¹ Cunningham, 'Archæological Reports,' vol. ii. p. 420.



Kandarya Mahadeo, Khajuráho. (From a Photograph.)

up of smaller repetitions of itself, which became at this age one of the favourite modes of decoration, and afterwards an essential feature of the style. Here it is managed with singular grace, giving great variety and play of light and shade, without unnecessarily breaking up the outline. The roof of the porch, as seen in front, is a little confused, but as seen on the flank it rises pleasingly step by step till it abuts against the tower, every part of the internal arrangement being appropriately distinguished on the exterior.



254.
Plan of Kandarya Mahadeo,
Khajuráho.
(From a Plan by Gen. Cunningham.)
Scale 50 ft. to 1 in.

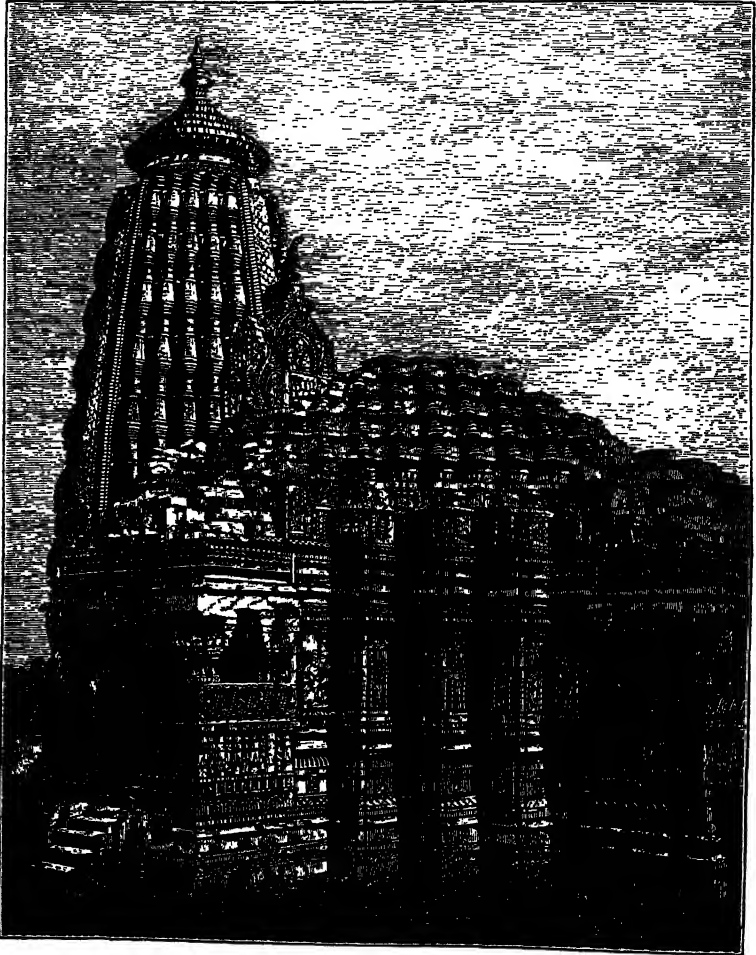
If we compare the design of the Jaina temple (Woodcut No. 136) with that of this building, we cannot but admit that the former is by far the most elegant, but on the other hand the richness and vigour of the Mahadeo temple redeem its want of elegance and fascinates in spite of its somewhat confused outline. The Jaina temple is the legitimate outcrop of the class of temples that originated in the Great Temple at Bhuvanewar, while the Kandarya Mahadeo exhibits a complete development of that style of decoration which resulted in continued repetition of itself on a smaller scale to make up a complete whole. Both systems have their advantages, but on the whole the simpler seems to be preferable to the more complicated mode of design.

UDAIPUR.

The examples already given will perhaps have sufficed to render the general form of the Indo-Aryan temple familiar to the reader, but as no two are quite like one another, their variety is infinite. There is one form, however, which became very fashionable about the 11th century, and is so characteristic that it deserves to be illustrated. Fortunately a very perfect example exists at a place called Udaipur, near Bhilsa, in the Bhopal territory.

As will be seen from the Woodcut (No. 255) the porch is covered with a low pyramidal roof, placed diagonally on the substructure, and rising in steps, each of which is ornamented with vases or urns of varying shapes. The tower is ornamented by four flat bands, of great beauty and elegance of design, between each of which are thirty-five little repetitions of itself, placed one above the other in five tiers, the whole surmounted by an amalaka, and an urn of very elegant design. As every part of this is carved with great precision and delicacy, and as the whole is quite perfect at the present

day, there are few temples of its class which give a better idea of the style than this one. Fortunately, too, its date is perfectly well known. From an inscription copied by Lieutenant Burt, it appears it was erected by a king who was reigning at Malwa, in the year 1060 of our era.¹



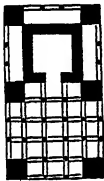
Temple at Udaiपुर.

At Kallian, in Bombay harbour, there is a temple called Ambernath, very similar to this, on making drawings and casts from which the

¹ 'Journal of the Asiatic Society of Bengal,' vol. ix. p. 548. The date is given from four different epochs, so that there can be no mistake about it.

Bombay government has lately spent a good deal of money.¹ It is, however, in a very ruinous state, and even when perfect could never have been equal to this one at Udaipur, and to many others on which the money might have been better laid out. In it there is a slab with an inscription, dated in the Saka year 782, or A.D. 860.² It is not quite clear, however, whether this inscription belongs to the temple which we now see, or to an earlier one, fragments of which are found built into the vimana of the present one. If the date of the temple is that just quoted, as Dr. Bhan Daji would have us believe, all that can be said is that it is utterly anomalous. If it is in A.D. 1070, as another inscription he quotes found near the place might lead us to infer,³ it accords with all else we know of the style.

One other illustration must complete what we now have to say regarding these Indo-Aryan temples. It is one of the most modern of the style, having been erected by Meera Baie, the wife of Khumbo



256.
Diagram explanatory
of the Plan of
Meera Baie's Temple,
Chittore.
No scale.

Rana of Chittore (A.D. 1418-1468). Khumbo was, as is well known, devoted to the Jaina faith, having erected the temple at Sadri (Woodcut No. 133), and the Pillar of Victory (Woodcut No. 143); yet here we find him and his wife erecting in their capital two temples dedicated to Vishnu. The king's temple, which is close by, is very much smaller than this one, for which his wife gets credit. In plan, the only peculiarity is that the pradakshina, or procession-path round the cell, is here an open colonnade, with four little pavilions at the four corners, and this

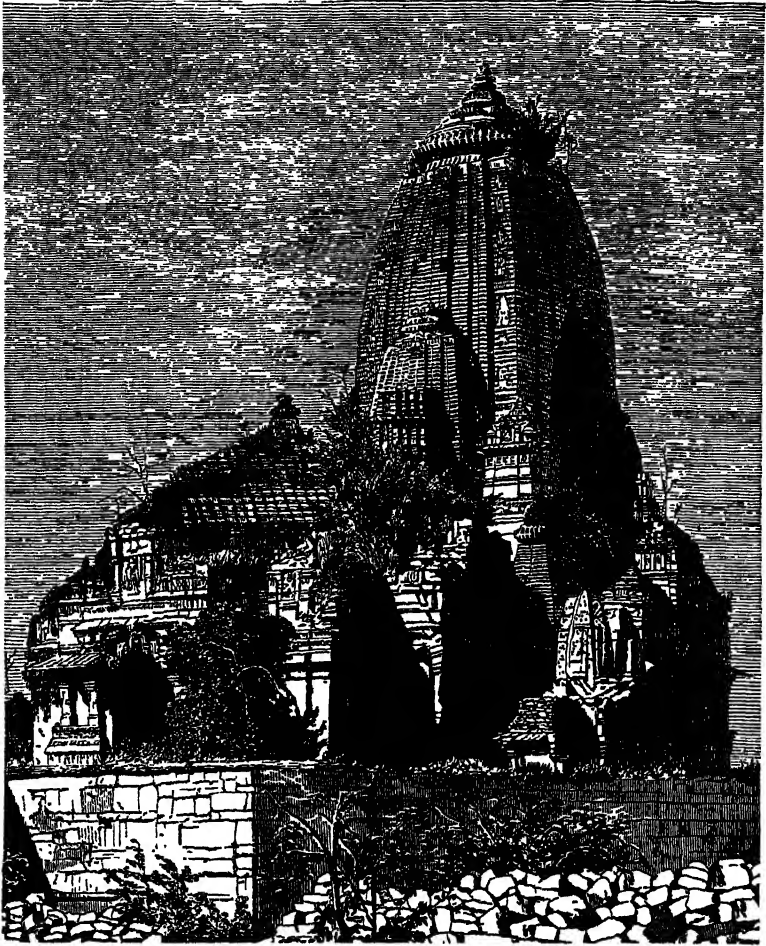
is repeated in the portico in the manner shown in the annexed diagram (Woodcut No. 256).

The roof of the portico, in the form of a pyramid, is placed diagonally as at Udaipur, while the tower itself is of so solid and unbroken an outline, that it might at first sight be ascribed to a much earlier date than the 15th century (Woodcut No. 257). When, however, it is closely looked at, we miss the frequent amalaka bands and other ornamental features of earlier times, and the crowning members are more unlike those of ancient temples. The curve, too, of its outline is regular from base to summit, and consequently feebler than that of the older examples; but taking it all in all, it certainly is more like an ancient temple than any other of its age I am acquainted with. It was a revival, the last expiring effort of a style that was dying out, in that form at least.

¹ A portion of the casts are in the South Kensington Museum. Transcripts from the drawings were published in the *Indian Antiquary*, vol. iii. p. 316.

² *Journal Bombay Branch of the Royal Asiatic Society*, vol. ix. p. 219.

³ *Ibid.*, vol. ix. p. 221.



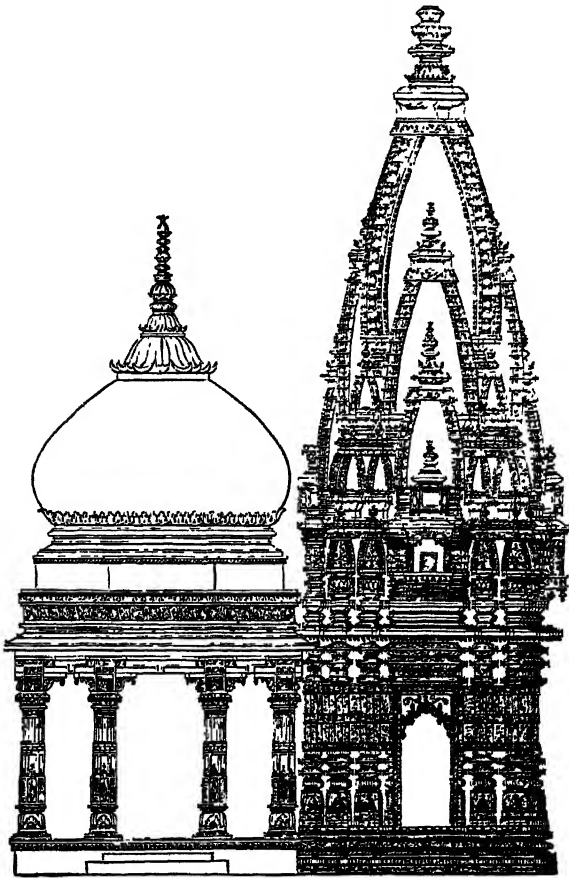
257.

Temple of Vriji, Chittore. (From a Photograph.)

VISHVESHWAR, BENARES.

If you ask a Brahman of Benares to point out to you the most ancient temple of his city, he inevitably leads you to the Vishveshwar, as not only the most holy, but the oldest of its sacred edifices. Yet it is known, and cannot be disputed, that the temple, as it now stands, was erected from the foundation in the last century, to replace one that had been thrown down and desecrated by the bigot Aurungzebe. This he did in order that he might erect on the most venerated spot of the Hindus his mosque, whose tall minarets still rear their heads in insult over all the Hindu buildings of the city. The strange thing is, that in this assertion the Brahmans are not so very

far from representing the true state of the case. There is hardly any great city in Hindustan that can show so few evidences of antiquity as Benares. The Buddhist remains at Sarnath hardly can be said to belong to the city, and even there they are, as above explained, the most modern examples of their class in India. The fact is, that the oldest buildings in the city are the Moslem tombs and



258. Temple of Vishveshwar. (From Prinsep's 'Views in Benares.') No scale.

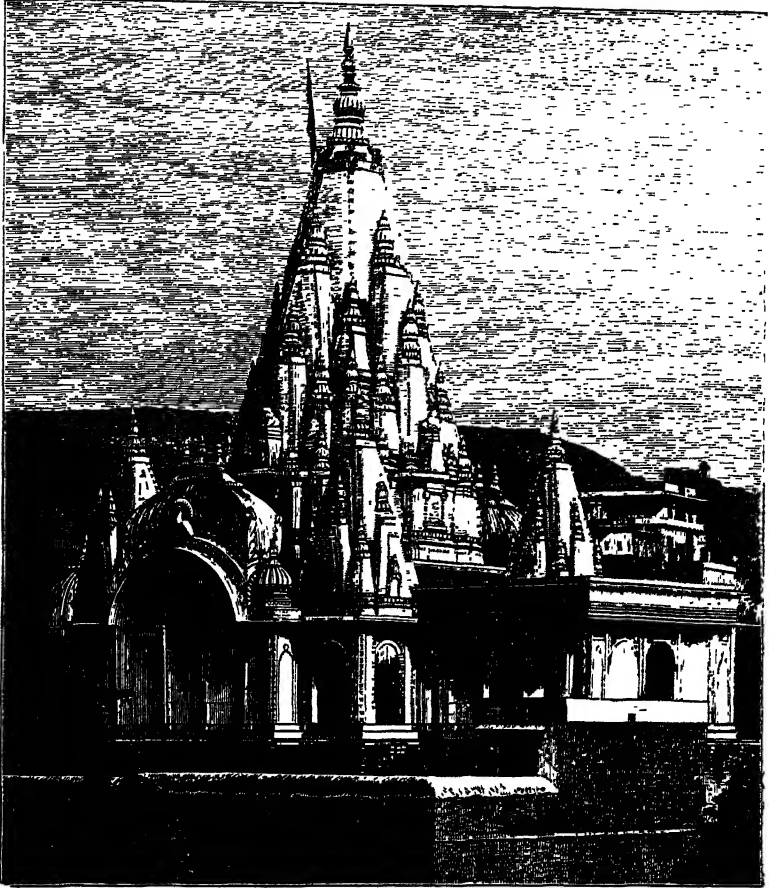
buildings about the Bukariya Kund, and they almost certainly belong to the 15th century. Even the temple of Vishveshwar, which Aurungzebe destroyed, was not erected before the reign of his predecessor Akbar. The style is so nearly identical with that of known buildings of his reign, at Muttra and elsewhere, that there can be no doubt on this head. When desecrated it was the principal, and probably the most splendid, edifice of its class in the city. It may be, and probably is true, that the Vedic Brahmans erected their fire

altars, and worshipped the sun, and paid adoration to the elements on this spot 4000 years ago. It may be also that the emblem of Siva has attracted admiring crowds to this spot for the last 1000 years; but there is no material evidence that before the time of Akbar (A.D. 1556-1605) any important permanent building was ever erected there to dignify the locality.

The present temple is a double one: two towers or spires almost exactly duplicates of each other. One of these is represented in the preceding woodcut (No. 258), and they are connected by a porch, crowned by a dome borrowed from the Mahomedan style, which, though graceful and pleasing in design, hardly harmonises with the architecture of the rest of the temple. The spires are each 51 ft. in height, and covered with ornament to an extent quite sufficient even in this style. The details too are all elegant, and sharply and cleanly cut, and without any evidence of vulgarity or bad taste; but they are feeble as compared with the more ancient examples, and the forms of the pyramidal parts have lost that expression of power and of constructive propriety which were so evident in the earlier stages of the art. It is, however, curiously characteristic of the style and place, that a building, barely 50 ft. in length, and the same in height, should be the principal temple in the most sacred city of the Hindus, and equally so that one hardly 150 years old should be considered as the most ancient, while it is only that which marks this most holy spot in the religious cosmogony of the Hindus.

TEMPLE OF SCINDIAH'S MOTHER, GUALIOR.

One more example must suffice to explain the ultimate form which the ancient towers of the Orissan temples have reached in the present century. It is just finished, having been erected by the mother of the present reigning Maharajah of Gualior, and to it has been added a tomb or cenotaph either by herself or her son. As will be seen from the woodcut (No. 259) it is elegant, though feeble as compared with ancient examples. The Mahomedan dome appears in the background, and the curved Bengali roof in the pavilion in front. The most striking peculiarity of the style is, that the sikras have nearly lost the graceful curved form, which is the most marked peculiarity of all the ancient examples. As has already been remarked, the straight-lined pyramid first appears in the Takht-i-Suleiman's temple in Kashmir, where its introduction was probably hastened by the wooden straight-lined roofs of the original native style. It is equally evident, however, in a temple which Cheyt Sing, the Raja of Benares, erected at Ramnugger in the end of the last or beginning of the present century. Since that time the tendency has been more and more in that direction, and if not heeded, the probability is that the curve will be entirely



259.

Temple of Scindiah's Mother, Gualior. (From a Photograph.)

lost before the century is out. To an European eye, accustomed only to our straight-lined spires, that may seem hardly a matter for regret; but to any one educated in Eastern forms it can scarcely appear doubtful that these spires will lose half their charm if deprived of the graceful curved outline they have so long retained.

BINDRABUN.

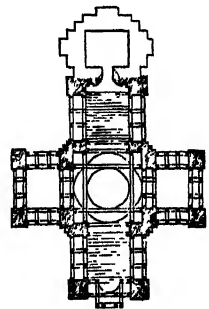
In order not to interrupt the story of the gradual development of the style, the history has been brought down to the present day in as nearly a consecutive manner as possible, thus anticipating the dates of several temples. It seems expedient, however, in any history that this should be done, for few things of its class are more interesting than to trace the progressive changes by which the robust form

of the Parasurameswara temple at Bhuraneswar, or of the great temple there, became changed into the feeble elegance of the Vishveshwar or Gualior temples. The few examples that can be adduced in such a work as this may not suffice to make this so clear to others as it is to myself. With twenty or thirty examples it could be made self-evident, and that may one day be done, and this curious chapter in architectural history be thus added to the established sequences which every true style of art affords. Meanwhile, however, it is necessary to go back a little to mention one or two aberrant types which still are not without interest.

As mentioned above, it does not appear proven that the Moslems did wantonly throw down the temples of the Hindus, except when they wanted the materials for the erection of mosques or other buildings. But, whether this was so or not, it is evident that the first three centuries of Mahomedan rule in India were singularly unfavourable for the development of Hindu art in any part of the country where their rule was firmly established. With the tolerant reign of Akbar, however, a new state of affairs was inaugurated. Not only was he himself entirely devoid of religious bigotry, but most—or at least the most eminent—of his ministers and friends were Hindus, and he lent an attentive ear to the Christian missionaries who frequented his court. But, besides its tolerance, his reign was marked by a degree of prosperity and magnificence till then unknown during that of any other Indian sovereign of his faith. Not only are his own buildings unrivalled in their extent and magnificence, but he encouraged all those around him to follow his example, and found, among others, a most apt imitator in the celebrated Man Singh of Ambér, afterwards of Jeypore, who reigned A.D. 1592–1615. He erected at Bindrabun a temple, which either he left unfinished at his death, or the sikra of which may have been thrown down by Aurungzebe. It is one of the most interesting and elegant temples in India, and the only one, perhaps, from which an European architect might borrow a few hints.

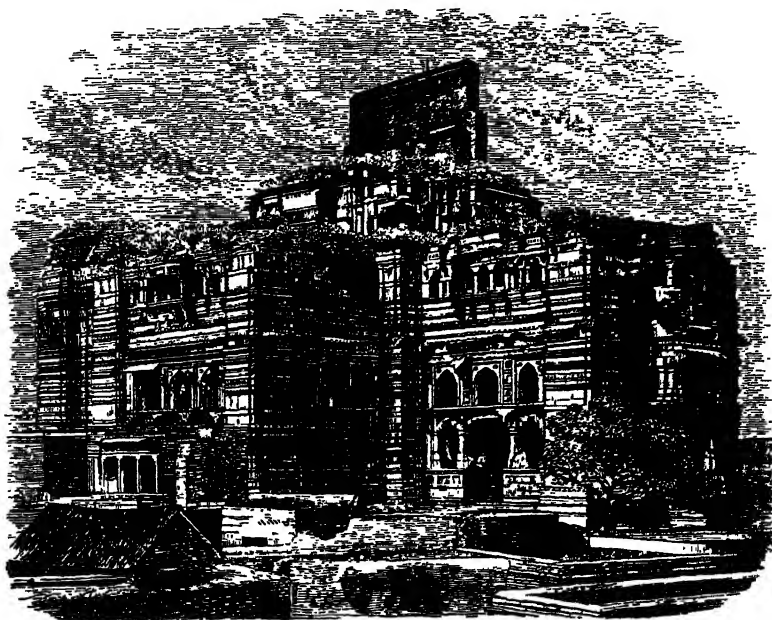
The temple, as it now stands, consists of a cruciform porch, internally nearly quite perfect, though externally it is not clear how it was intended to be finished (Woodcuts Nos. 260, 261). The cell, too, is perfect internally—used for worship—but the sikra is gone; possibly it may never have been completed. Though not large, its dimensions are respectable, the porch measuring 117 ft. east and west, by 105 ft. north

and south, and is covered by a true vault, built with radiating arches—the only instance, except one, known to exist in a Hindu temple



260.
Plan of Temple at Bindrabun.
(By the Author.)
Scale 100 ft. to 1 in.

in the north of India. Over the four arms of the cross the vault is plain, and only 20 ft. span, but in the centre it expands to 35 ft., and is quite equal in design to the best Gothic vaulting known. It is the external design of this temple, however, which is most remarkable. The angles are accentuated with singular force and decision, and the openings, which are more than sufficient for that climate, are picturesquely arranged and pleasingly divided. It is, however, the combination of vertical with horizontal lines, covering the whole surface, that forms the great merit of the design. This is, indeed, not peculiar to this temple; but at Bhuvaneswar,

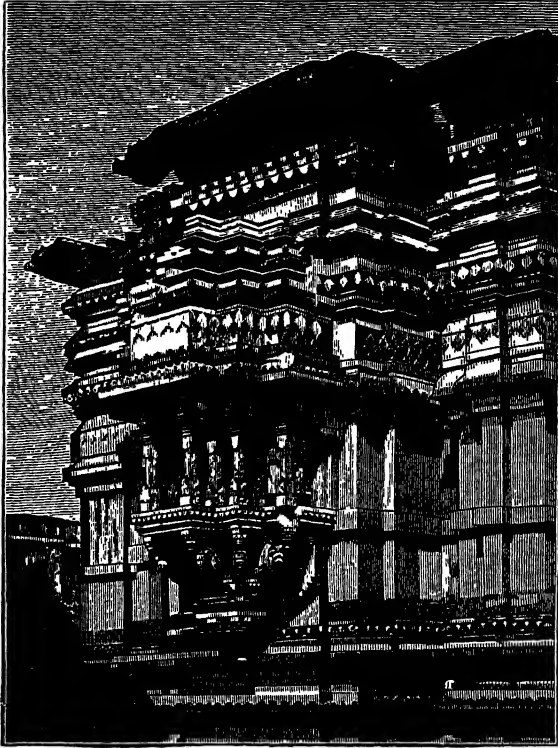


261.

View of Temple at Bindrabun. (From a Photograph)

Hullabid, and elsewhere, the whole surface is so overloaded with ornament as to verge on bad taste. Here the accentuation is equal, but the surfaces are comparatively plain, and the effect dependent on the elegance of the profile of the mouldings rather than on the extent of the ornamentation. Without elaborate drawings, it would be difficult to convey a correct impression of this; but the annexed view (Woodcut No. 262) of a balcony, with its accompaniments, will suffice to illustrate what is meant. The figures might as well be omitted: being carved where Moslem influences had long been strong, they are the weakest part of the design.

The other vaulted temple, just alluded to, is at Goverdhun, not far off, and built under the same tolerant influence during the reign



262.

Balcony in Temple at Bindrabun. (From a Photograph.)

of Akbar. It is a plain edifice 135 ft. long by 35 ft. in width externally, and both in plan and design singularly like those early Romance churches that are constantly met with in the south of France, belonging to the 11th and 12th centuries. If, indeed, the details are not too closely looked into, it might almost pass muster for an example of Christian art at that age,¹ while except in scale the plan of the porch at Bindrabun bears a most striking resemblance to that of St. Front at Perigeux (Woodcut No. 328, vol. i.). The similarity is accidental, of course; but it is curious that architects so distant in time and place should hit so nearly on the same devices to obtain certain desired effects.

KANTONUGGUR.

In addition to the great Indo-Aryan style of temple-building described above, there are a number of small aberrant types which

¹ Both these temples are illustrated in *Mitra and Agra*, published by the India Office, 1873, to which the reader is referred for further information.

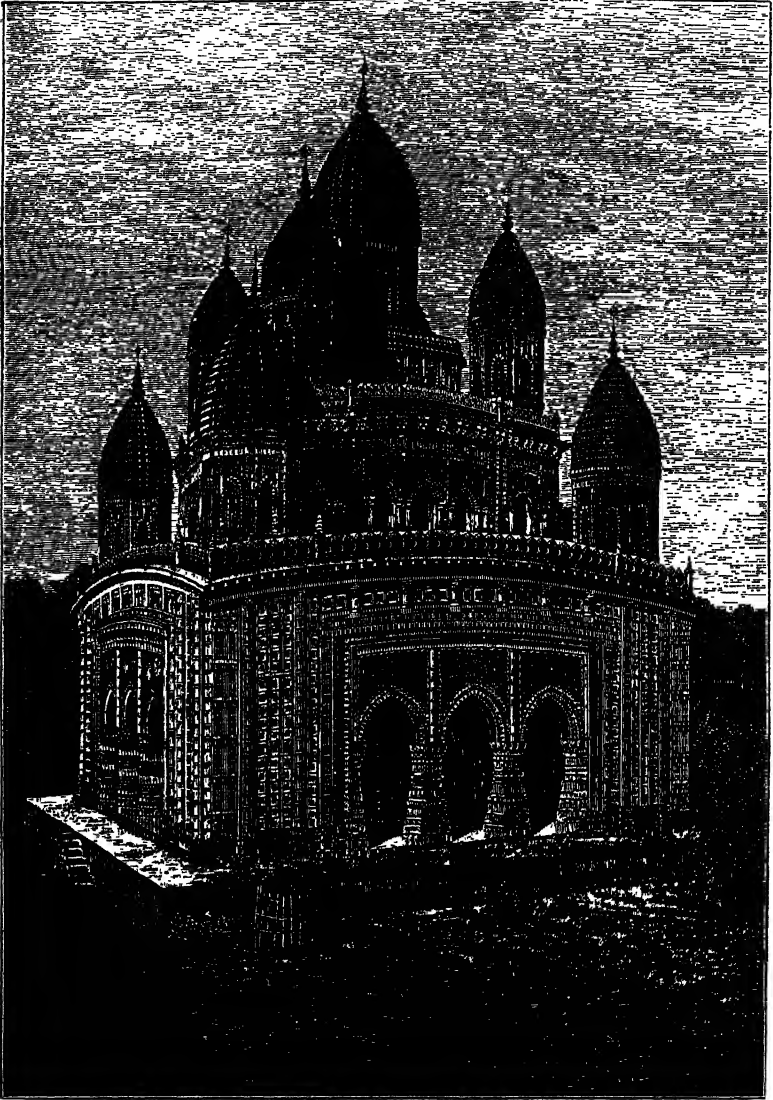
it might be expedient to describe in a more extensive work: but, except one, none of them seem of sufficient importance to require illustration in a work like the present. The exceptional style is that which grew up in Bengal proper on the relaxation of the Mahomedan severity of religious intolerance, and is practised generally in the province at the present day. It may have existed earlier, but no examples are known, and it is consequently impossible to feel sure about this. Its leading characteristic is the bent cornice, copied from the bambu huts of the natives. To understand this, it may be as well to explain that the roofs of all the huts in Bengal are formed of two rectangular frames of bambus, perfectly flat and rectangular when formed, but when lifted from the ground and fitted to the substructure they are bent so that the elasticity of the bambu, resisting the flexure, keeps all the fastenings in a state of tension, which makes a singularly firm roof out of very frail materials. It is the only instance I know of elasticity being employed in building, but is so singularly successful in attaining the desired end, and is so common, that we can hardly wonder when the Bengalis turned their attention to more permanent modes of building they should have copied this one. It is nearly certain that it was employed for the same purposes before the Mahomedan sovereignty, as it is found in all the mosques at Gaur and Malda: but we do not know of its use in Hindu temples till afterwards, though now it is extremely common all over northern India.

One of the best examples of a temple in this style is that at Kantonuggur, twelve miles from the station at Dinajepore. It was commenced in A.D. 1704 and finished in 1722.¹ As will be seen from the annexed illustration (Woodcut No. 263), it is a nine-towered temple, of considerable dimensions, and of a pleasingly picturesque design. The centre pavilion is square, and, but for its pointed form, shows clearly enough its descent from the Orissan prototypes; the other eight are octagonal, and must, I fancy, be derived from Mahomedan originals. The pointed arches that prevail throughout are certainly borrowed from that style, but the building being in brick their employment was inevitable.

No stone is used in the building, and the whole surface is covered with designs in terra-cotta, partly conventional, and these are frequently repeated, as they may be without offence to taste; but the bulk of them are figure-subjects, which do not ever seem to be repeated, and form a perfect repository of the manners, customs, and costumes of the people of Bengal at the beginning of the last century. In execution they display an immeasurable inferiority to the carvings

¹ Buchanan Hamilton, 'Eastern India,' edited by Montgomery Martin, 1837, vol. ii. p. 628

on the old temples in Orissa or the Mysore, but for general effect of richness and prodigality of labour this temple may fairly be allowed to compete with some of the earlier examples.



263.

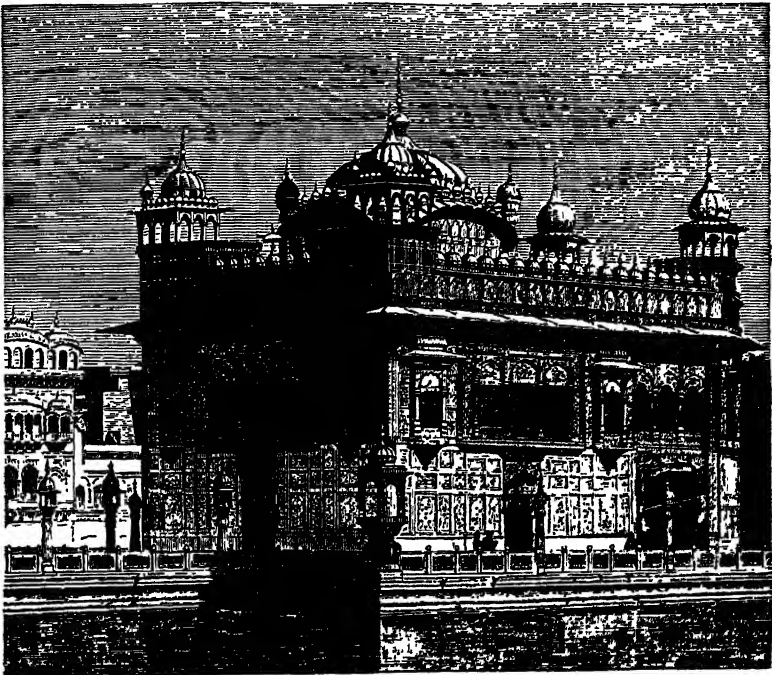
Temple at Kantonuggur. (From a Photograph)

There is another and more ornate temple, in the same style, at Gopal Gunge,¹ in the same district, but in infinitely worse taste ; and

one known as the Black Pagoda, at Calcutta, and many others all through Lower Bengal ; but hardly any so well worthy of illustration as this one at Kantonuggur.

AMRITSUR.

One other example may serve for the present to complete what we have at present to say regarding the temples of modern India. This time, however, it is no longer an idol-shrine, but a monotheistic place of prayer, and differs, consequently, most essentially from those we



have been describing. The religion of the Sikhs appears to have been a protest alike against the gross idolatry of the Hindus and the inflexible monotheism of the Moslems. It does not, however, seem that temples or gorgeous ceremonial formed any part of the religious system propounded by its founders. Reading the 'Granth' and prayer are what were insisted upon, but even then not necessarily in public. We, in consequence, know nothing of their temples, if they have any ; but Runjeet Singh was too emulous of the wealth of his Hindu and Moslem subjects in this respect not to desire to rival their magnificence, and consequently we have the Golden Temple in the Holy

Tank at Amritsur—as splendid an example of its class as can be found in India, though neither its outline nor its details can be commended (Woodcut No. 264). It is useful, however, as exemplifying one of the forms which Indian temple-architecture assumed in the 19th century, and where, for the present, we must leave it. The Jains and Hindus may yet do great things in it, if they can escape the influence of European imitation; but now that the sovereignty has passed from the Sikhs we cannot expect their priests or people to indulge in a magnificence their religion does not countenance or encourage.

CHAPTER V.

CIVIL ARCHITECTURE.

CONTENTS.

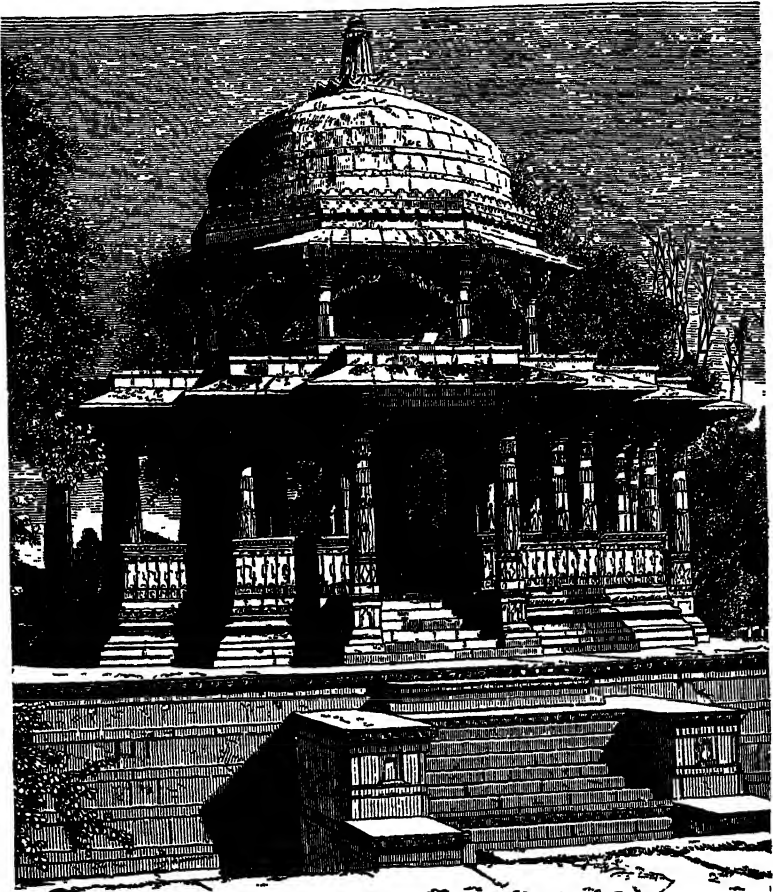
Cenotaphs—Palaces at Gualior, Ambêr, Deeg—Ghâts—Reservoirs—Dams.

CENOTAPHS.

As remarked above, one of the most unexpected peculiarities of the art, as practised by the inhabitants of southern India, is the absence of any attempt at sepulchral magnificence. As the Dravidians were undoubtedly of Turanian origin, and were essentially builders, we certainly would expect that they should show some respect for the memories of their great men. It is, however, even uncertain how far the cromlechs, dolmens, or sepulchral circles found all over the south of India can be said to belong to the Dravidians in a ruder stage of society, or whether they belong to some aboriginal tribes who may have adopted the language of the superior races without being able to change the instincts of their race. Even after they had seen how much respect the Mahomedans paid to departed greatness, they failed to imitate them in this peculiarity. It was otherwise in the north of India—not among the pure Aryans, of course; but in the Rajput states, where blood is less pure, they eagerly seized the suggestion offered by Mahomedan magnificence in this respect, and erected chuttries on the spots where their bodies had been burnt. Where, too, their widows, with that strange devotion which is the noblest trait in the Hindu female's character, had sacrificed themselves to what they conceived to be their duty.

In Rajputana every native capital has its Maha Sati, or place where the sovereigns of the state and their nearest relatives are buried with their wives. Most of these are appropriately situated in a secluded spot at some little distance from the town, and, the locality being generally chosen because it is rocky and well-wooded, it forms as picturesque a necropolis as is to be found anywhere. Of these, however, the most magnificent, and certainly among the most picturesque, is that of Oudeypore, the capital of Mewar and the chief of all the Rajput states still existing. Here the tombs exist literally in hundreds, of all sizes, from the little domical canopy supported by

four columns to the splendid chuttry whose octagonal dome is supported by fifty-six, for it has been the burying-place of the race ever since they were expelled from the ancient capital at Chittore by Akbar in 1580. All are crowned by domes, and all make more or less pretensions to architectural beauty; while as they are grouped together as accident dictated, and interspersed with noble trees, it would be difficult to point out a more beautiful cemetery anywhere.

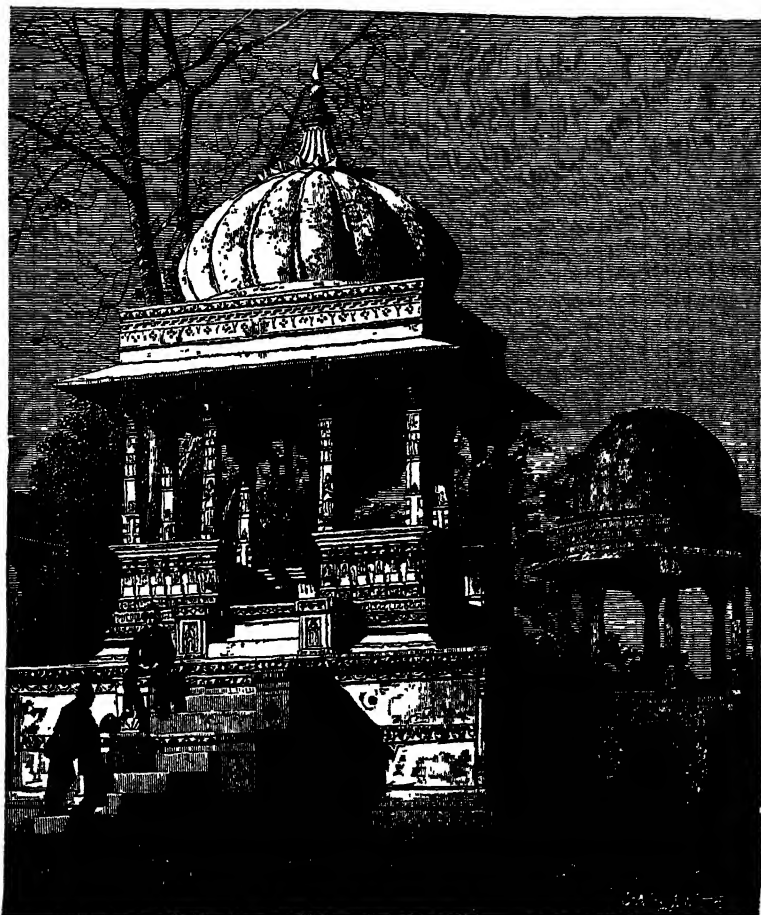


265.

Cenotaph of Singram Sing at Oudypore. (From a Photograph.)

Among the finest is that of Singram Sing, one of the most illustrious of his race, who was buried on this spot, with twenty-one of his wives, in A.D. 1733. As will be seen from the annexed Woodcut (No. 265), it is a fifty-six pillared portico, with one octagonal dome in the centre (*vide ante*, Woodcut No. 119). The dome itself is supported on eight dwarf pillars, which, however, hardly seem sufficient

for the purpose. The architect seems to have desired to avoid all appearances of that gloom or solemnity which characterise the contemporary tombs of the Moslems, but, in doing this, to have erred in the other direction. The base here is certainly not sufficiently solid for the mass it has to support; but the whole is so elegant, and the effect so pleasing, that it seems hypercritical to find fault



with it, and difficult to find, even among Mahomedan tombs, anything more beautiful.

He it was, apparently, who erected the cenotaph to the memory of his predecessor Amera Sing II., for the Hindus do not appear to have gone so far in their imitation of the Moslems as to erect their own tombs. In style it is very similar to that last described, except

that it possesses only thirty-two columns instead of fifty-six. It has, however, the same lofty stylobate, which adds so much to the effect of these tombs, but has also the same defect—that the dome is raised on eight dwarf columns, which do not seem sufficient for the purpose.¹

Woodcut No. 266 represents a cenotaph in this cemetery with only twelve columns, which, *mutatis mutandis*, is identical with the celebrated tomb at Halicarnassus.² The lofty stylobate, the twelve columns, the octagonal dome, and the general mode of construction are the same; but the twelve or thirteen centuries that have elapsed between the construction of the two, and the difference of locality, have so altered the details that the likeness is not at first sight easily recognisable. From the form of its dome it is evidently considerably more modern than that last described; it may, indeed, have been erected within the limits of the present century.

To the right of the same woodcut is another cenotaph with only eight pillars, but the effect is so weak and unpleasing that it is hardly to be wondered at that the arrangement is so rare. The angle columns seem indispensable to give the design that accentuation and firmness which are indispensable in all good architecture.

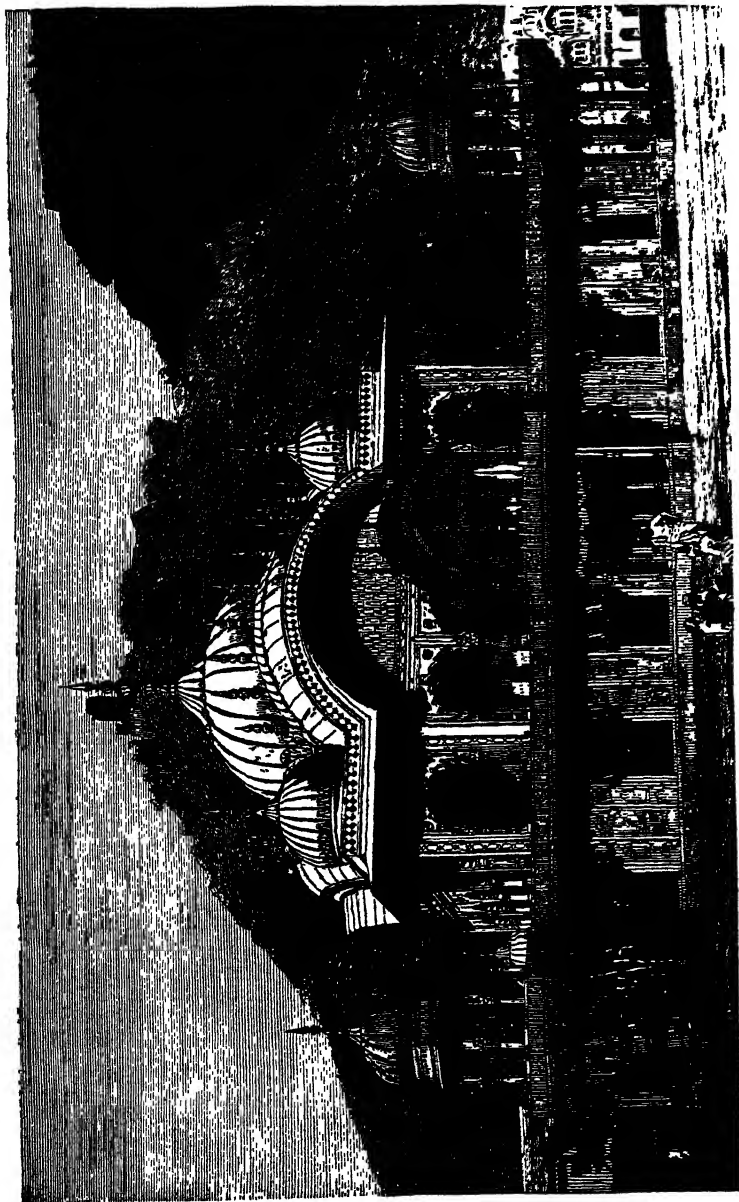
These last two illustrations, it will be observed, are practically in the Jaina style of architecture; for, though adopting a Mahomedan form, the Ranas of Oudeypore clung to the style of architecture which their ancestors had practised, and which Khumbo Rana had only recently rendered so famous. This gives them a look of greater antiquity than they are entitled to, for it is quite certain that Oudeypore was not the capital of the kingdom before the sack of Chittore in 1580; and nearly equally so that the Hindus never thought of this mode of commemorating their dead till the tolerant reign of Akbar. He did more than all that had been done before or since to fuse together the antagonistic feelings of the two religions into at least a superficial similarity.

Further north, where the Jaina style never had been used to the same extent at least as in the south-west, the Hindus adopted quite a different style in their palaces and cenotaphs. It was much more of an arched style, and though never, so far as I know, using a true arch, they adopted the form of the foliated arch, which is so common in the palaces of Agra and Delhi, and all the Mogul buildings. In the palace at Deeg, and in the cenotaphs of Goverdhun, this style is seen in great perfection. It is well illustrated, with all its peculiarities, in the next view of the tomb of Baktawar Sing at Ulwar,

¹ A view of this temple is given in my 'Pictoresque Illustrations of Ancient Architecture in Hindostan,' pl. 14.

² *Ante*, vol. i., Woodcut No. 241.

erected within the limits of the present century (Woodcut No. 267). To a European eye, perhaps the least pleasing part will be the Beau-



267. Cenotaph of Raja Bahadur at Ulwar. (From a photograph.)

gali curved cornices alluded to in the last chapter; but to any one familiar with the style, its employment gets over many difficulties

hat a straight line could hardly meet, and altogether it makes up with its domes and pavilions as pleasing a group of its class as is to be found in India, of its age at least. The tombs of the Bhurtpore Rajahs at Goverdhun are similar to this one, but on a larger scale, and some of them being older, are in better taste; but the more modern ones avoid most of the faults that are only too characteristic of the art in India at the present day, and some of them are very modern. One was in course of construction when I was there in 1839, and from its architect I learned more of the secrets of art as practised in the Middle Ages than I have learned from all the books I have since read. Another was commenced after the time of my visit, and it is far from being one of the worst buildings of its class. If one could only inspire the natives with a feeling of pride in their own style, there seems little doubt that even now they could rival the works of their forefathers.

PALACES.

Another feature by which the northern style is most pleasingly distinguished from the southern, is the number and beauty of the palaces, which are found in all the capitals of the native states, especially in Rajputana. These are seldom designed with much reference to architectural symmetry or effect, but are nevertheless always picturesque and generally most ornamental objects in the landscape where they are found. As a rule, they are situated on rocky eminences, jutting into or overhanging lakes or artificial pieces of water, which are always pleasing accompaniments to buildings of any sort in that climate; and the way they are fitted into the rocks, or seem to grow out of them, frequently leads to the most picturesque combinations. Sometimes their bases are fortified with round towers or bastions, on whose terraces the palace stands; and even when this is not the case, the basement is generally built up solid to a considerable height, in a manner that gives a most pleasing effect of solidity to the whole, however light the superstructure may be, and often is. If to these natural advantages you add the fact that the high caste Hindu is almost incapable of bad taste, and that all these palaces are exactly what they profess to be, without any affectation of pretending to be what they are not, or of copying any style, ancient or modern, but that best suited for their purposes—it will not be difficult to realise what pleasing objects of study these Rajput palaces really are. At the same time it will be easily understood how difficult it must be in such a work as this to convey any adequate idea of their beauty; without plans explaining their arrangements, and architectural details of their interior, neither their elegance nor appropriateness can be judged of. A palace is not like a temple—a simple edifice of one or two halls or cells, almost identical with hundreds of others; but a vast

congeries of public and private apartments grouped as a whole more for convenience than effect.

Few of the palaces of India have escaped the fate of that class of edifice all the world over. Either they must be deserted and left to decay, which in India means rapid obliteration, or they must be altered and modified to suit the requirements of subsequent occupants, till little if anything remains of the original structure. This fate, so far as is known, has overtaken all the royal abodes that may have existed before the dark ages; so much so, indeed, that no trace of them has been found anywhere. Even after that we look in vain for anything important before the 13th century. At Chittore, for instance, where one of the earliest Rajput dynasties was established, there are buildings that bear the name of the Palace of the Mori, but so altered and remodelled as to be unrecognisable as such; nor can the palace of the Khengar at Girnar exhibit any feature that belongs to the date to which it is assigned.

At Chittore the oldest building of this class which can with certainty be said to have existed anterior to the sack of the place by Alla-ud-din in 1305, is the palace of Bhim and Pudmandi, which remains unaltered, and is, though small, a very pleasing example of the style.¹ The palace of Khumbo Rana (A.D. 1418-1468) in the same place is far more grandiose, and shows all that beauty of detail which characterises his buildings in general.

The palaces at Chittore belonging to this dynasty were however far surpassed, in extent at least, by those which Udyā Sing commenced at Udyapur or Oudeypore, to which place he removed his capital after the third sack of Chittore by Akbar in 1580. It has not unfrequently been compared with the Castle at Windsor, and not inaptly, for both in outline and extent it is not unlike that palace, though differing so wonderfully in detail and in situation. In this latter respect the Eastern has the advantage of the Western palace, as it stands on the verge of an extensive lake, surrounded by hills of great beauty of outline, and in the lake are two island palaces, the Jug Newas and Jug Mundir, which are more beautiful in their class than any similar objects I know of elsewhere.² It would be difficult to find any scene where art and nature are so happily blended together and produce so fairy-like an effect. Certainly nothing I know of so modern a date equals it.

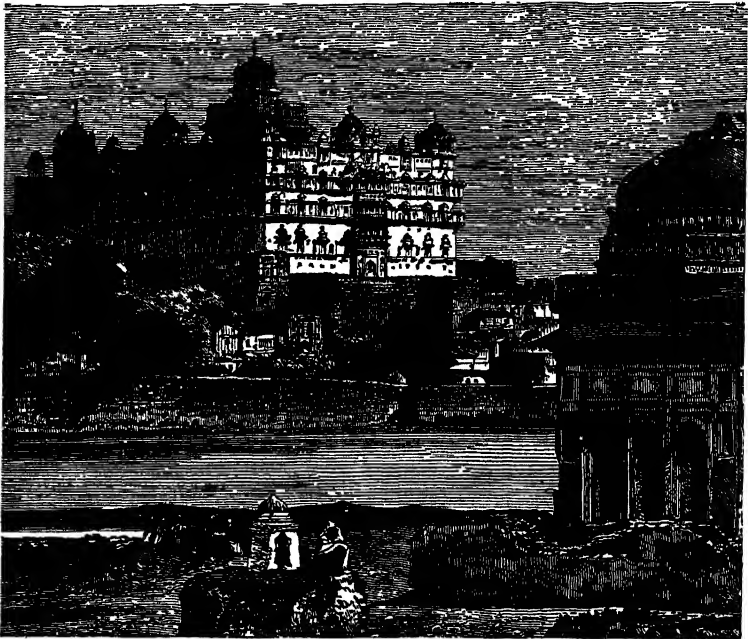
The palace at Boondi is of about the same modern age as that at

¹ A view of it is given in Tod's 'Rajasthan,' vol. i. p. 267. Some parts have been misunderstood by the engraver, but on the whole it represents the building fairly.

² A view of one of these is given in my 'Illustrations of Ancient Architecture in India,' plate 15. Other illustrations will be found in 'L'Inde des Rajahs,' p. 187, *et seqq.*

Oudeypore, and almost equals it in architectural effect. It is smaller however, and its lake is less in extent, and has only temples standing on its islets, instead of palaces with their pavilions and gardens. Still, the mode in which it is placed on its hill, and the way in which its buildings gradually fade into the bastions of the hill above, are singularly picturesque even for this country, and the hills being higher, and the valleys narrower, the effect of this palace is in some respects even more imposing than that at Oudeypore.

There are, however, some twenty or thirty similar royal residences in Central India, all of which have points of interest and beauty : some



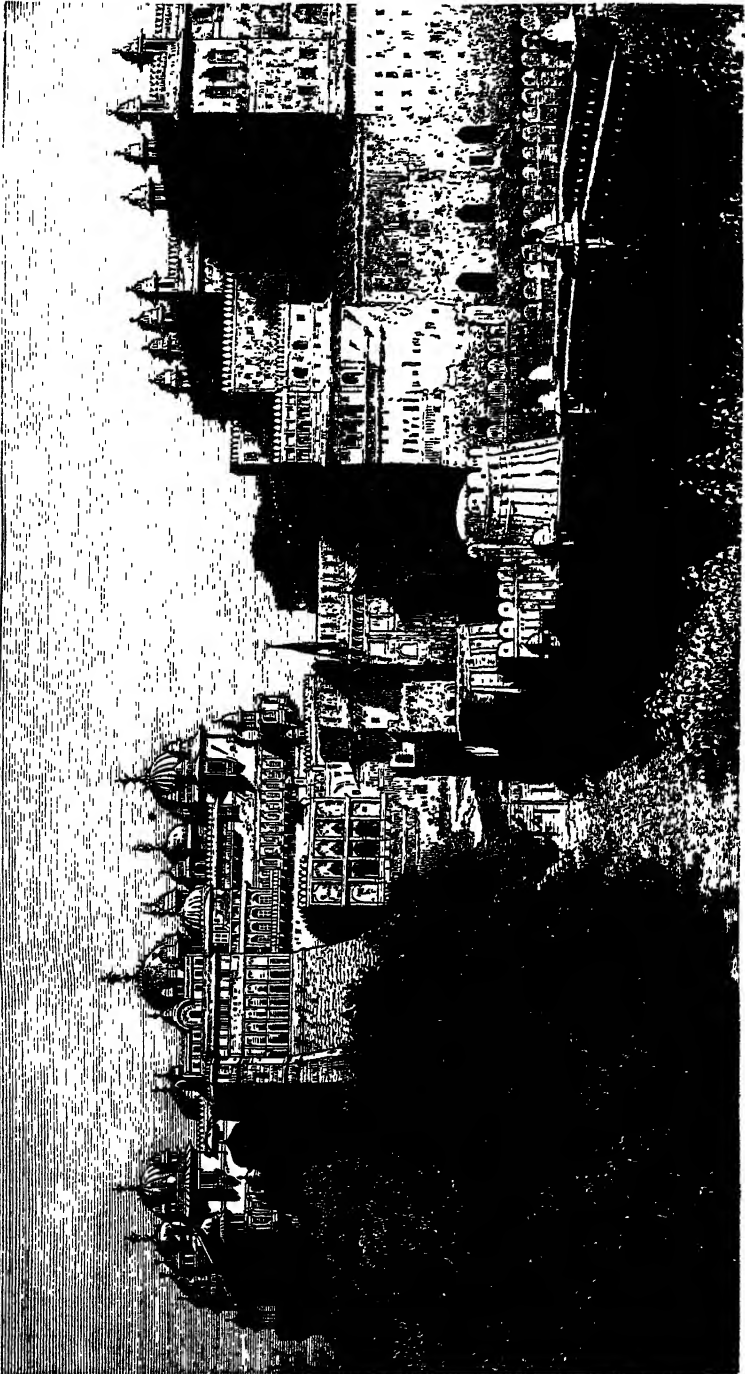
268.

Palace at Duttiah. (From a Photograph.)

for their extent, others for their locality, and some for their beauty in detail, but every one of which would require a volume to describe in detail. Two examples, though among the least known, must at present suffice to illustrate their general appearance.

That at Duttiah (Woodcut No. 268), in Bundelcund, is a large square block of building, more regular than such buildings generally are, but still sufficiently relieved both in outline, and in the variety of detail applied to the various storeys, to avoid monotony, and with its gardens leading down to the lake, and its tombs opposite, combine to make up an architectural scene of a singularly pleasing character.

The other is even less known, as it belongs to the little Bundel-



Palace at Ouzchia Bundelemul. (From a Photograph.)

cund state of Ourtcha (Woodcut No. 269), but is of a much more varied outline than that at Duttiah, and with its domes and gateways makes up as picturesque a combination as can well be found anywhere. It is too modern for much purity of detail, but that in a residence is less objectionable than it would be in a temple, or in an edifice devoted to any higher purpose.

GUALIOR.

Perhaps the most historically interesting of these Central Indian palaces is that of Gualior. The rock on which that fortress stands is of so peculiar a formation, and by nature so strong, that it must always have been occupied by the chiefs of the state in which it is situated. Its temples have already been described, but its older palaces have undergone the fate of all similar edifices; it, however, possesses, or possessed, in that built by Mân Sing (A.D. 1486–1516), the most remarkable and interesting example of a Hindu palace of an early age in India. The external dimensions of this palace are 300 ft. by 160 ft., and on the east side it is 100 ft. high, having two underground storeys looking over the country. On all its faces the flat surface is relieved by tall towers of singularly pleasing design, crowned by cupolas that were covered with domes of gilt copper when Baber saw them in 1527.¹ His successor, Vicramaditya, added another palace, of even greater extent, to this one in 1516;² and Jehangir and Shah Jehan added palaces to these two, the whole making up a group of edifices unequalled for picturesqueness and interest by anything of their class that exists in Central India.³ Among the apartments in the palace was one called the Baradurri, supported on twelve columns, and 45 ft. square, with a stone roof, which was one of the most beautiful apartments of its class anywhere to be

Erskine's 'Memoirs of Baber,' p. 384.

These particulars are taken from Cunningham's 'Archæological Reports,' *vol. ii.* p. 346, *et seqq.*, plates 87 and 88.

³ How far anything of all this now exists is by no means clear. We occupied the fort during the mutiny, and have retained it ever since. The first thing done was to occupy the Barradurri as a mess-room: to fit up portions of the palace for military occupation; then to build a range of barracks, and clear away a lot of antiquarian rubbish to make a parade ground. What all this means is only too easily understood. M. Rousselet—no unfriendly critic—observes:—"Les Anglais sont très-activement occupés à

simplifier la besogne de l'archéologue, et à faire disparaître ce précieux document de l'histoire de l'Inde; déjà toutes les constructions à la gauche de la porte de l'est sont livrées à la pioche et le même sort est réservé au reste ('L'Inde des Rajah's,' p. 302). And, again: "Mais, hélas! l'Ourwahâï lui aussi a vécu. Quand j'y revins en Décembre, 1867, les arbres étaient coupés, les statues volaient en éclats, sous les pics des travailleurs, et le ravin se remplissait des talus d'une nouvelle route construite par les Anglais—talus dans lesquels dorment les palais des Chandelas et des Tomars, les idoles des Bouddhistes et des Jains."—*Loc. cit.* p. 366.

found. It was, besides, singularly interesting from the expedients to which the Hindu architect was forced to resort to imitate the vaults of the Moslems. They had not then learned to copy them, as they did at the end of that century, at Bindrabun and elsewhere, under the guidance of the tolerant Akbar.

Of these buildings, which so excited the admiration of the Emperor Baber, probably little now remains. The Moslems added to the palaces of the Hindus, and spared their temples and the statues of the Jains. We have ruthlessly set to work to destroy whatever interferes with our convenience, and during the few years we have occupied the fort, have probably done more to disfigure its beauties, and obliterate its memories, than was caused by the Moslems during the centuries they possessed or occupied it. Better things were at one time hoped for, but the fact seems to be, the ruling powers have no real heart in the matter, and subordinates are allowed to do as they please, and if they can save money or themselves trouble, there is nothing in India that can escape the effect of their unsympathising ignorance.

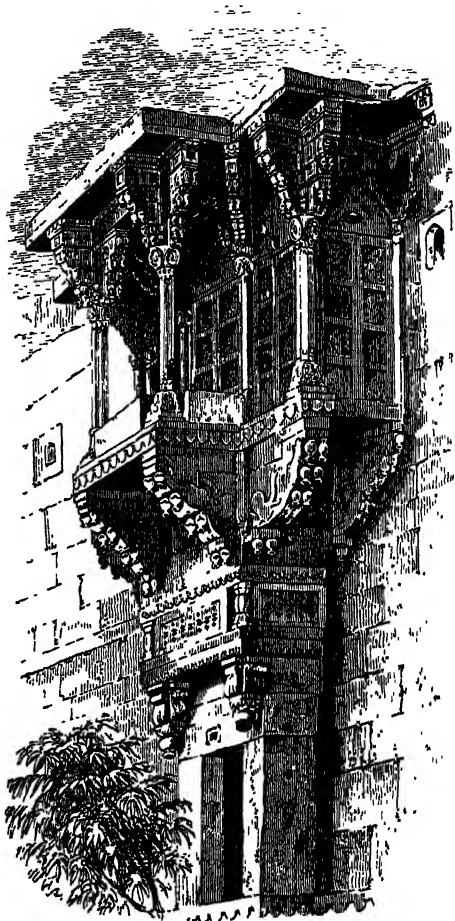
AMBÉR.

The palace at Ambér, the original capital of the Jeypore states, ranks next after that of Gualior as an architectural object among the Rajput palaces. It is, however, a century more modern, having been commenced by another Mân Singh, who ascended the throne in 1592, and was completed by Siwai Jey Sing, who added the beautiful gateway which bears his name before he removed the seat of government to Jeypore in 1728. In consequence of this more modern date it has not that stamp of Hindu originality that is so characteristic of the Gualior example, and throughout it bears a strong impress of that influence which Akbar's mind and works stamped on everything that was done in India during his reign. Its situation, too, is inferior to that of Gualior for architectural effect. Instead of standing on a lofty rocky pedestal, and its pinnacles being relieved boldly against the sky, the Ambér palace is situated in a valley—picturesque, it is true, but where the masonry competes with the rocks in a manner which is certainly unfavourable to the effect of the building. Nothing, however, can be more picturesque than the way in which the palace grows, as it were, out of a rocky base or reflects itself in the mirror of the deep lake at its base, and nothing can be happier than the mode in which the principal apartments are arranged, so as to afford views over the lake and into the country beyond.

The details, too, of this palace are singularly good, and quite free from the feebleness that shortly afterwards characterised the style. In some respects, indeed, they contrast favourably with those of Akbar's contemporary palace at Futtehpoore Sikri. There the

second commandment confined the fancy of the decorator to purely inanimate objects; here the laxer creed of the Hindus enabled him to indulge in elephant capitals and figure-sculpture of men and animals to any extent. The Hindus seem also to have indulged in colour and in mirrors to an extent that Akbar did not apparently feel himself justified in employing. The consequence is that the whole has a richer and more picturesque effect than its Mahomedan rival, but the two together make up a curiously perfect illustration of the architecture of that day, as seen from a Hindu, contrasted with that from a Mahomedan, point of view.

It was the same Mán Sing who erected the Observatory at Benares which still bears his name, and though not very architectural in its general appearance, has on the river-face a balconied window, which is a fair and pleasing specimen of the architecture of his age (Woodcut No. 270). He also was the king who erected the temple at Bindrabun, which has been illustrated above (pp. 463, 464).



270. Balcony at the Observatory, Benares. (From a Drawing by the late James Princeps.)

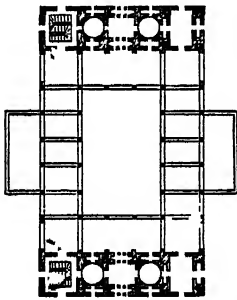
DEEG.

All the palaces above described are more or less irregular in their disposition, and are all situated on rocky and uneven ground. That at Deeg, however, is on a perfectly level plain, and laid out with a regularity that would satisfy the most fastidious Renaissance architect. It is wholly the work of Sûraj Mull, the virtual founder

of the Bhurtpore dynasty, who commenced it, apparently in 1725, and left it as we now see it, when he was slain in battle with Nudjiff Khan in 1763. It wants, it is true, the massive character of the fortified palaces of other Rajput states, but for grandeur of conception and beauty of detail it surpasses them all.

The whole palace was to have consisted of a rectangular enclosure twice the length of its breadth, surrounded with buildings, with a garden in the centre, divided into two parts by a broad terrace, intended to carry the central pavilion. Only one of these rectangles has been completed, measuring about 700 feet square,¹ crossed in the centre by ranges of the most beautiful fountains and parterres, laid out in the formal style of the East, and interspersed with architectural ornaments of the most elaborate finish.

The pavilion on the north side contains the great audience-hall, 76 ft. 8 in. by 54 ft. 7 in., divided in the centre by a noble range of arcades, behind which are the principal dwelling apartments, two, and in some parts three, storeys in height. Opposite this is a pavilion occupied principally by fountains. On one side stands a marble hall, attached to an older palace facing the principal pavilion, which was meant to occupy the centre of the garden. As will be seen by the plan (Woodcut No. 271), it is a parallelogram of 152 ft. by 87 ft.,



271. Hall at Deeg
(From a Plan by the Author.)
Scale 100 ft. to 1 in.

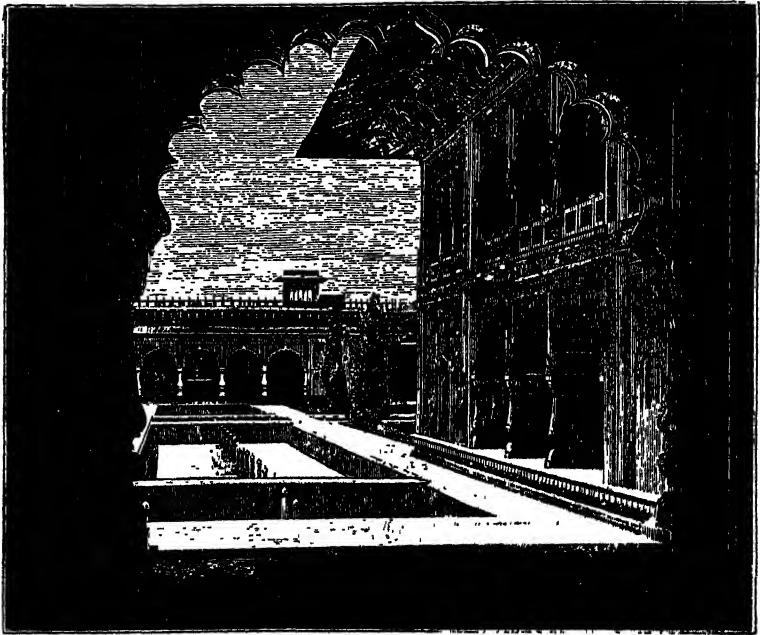
each end occupied by a small but very elegant range of apartments, in two storeys; the central hall (108 ft. by 87 ft.) is supported on four rows of columns, and open at both sides; at each end is a marble reservoir for fountains, and a similar one exists externally on each side. The whole is roofed with stone, except the central part, which, after being contracted by a bold cove, is roofed with a flat ceiling of timber exquisitely carved. This wooden ceiling seems to have been considered a defect, nothing but stone being used in any other part of the palace. The architect, therefore,

attempted to roof the corresponding pavilion of the unfinished court with slabs of stone 34 ft. in length, and 18 in. square. Some of these still exist in their places, but their weight was too great for the arcades, which are only 18 in. thick, and not of solid stone, but of two facings 4 in. or 5 in. thick, and the intermediate spaces filled in with rubble. Besides this, though the form of the arch is literally copied from the Mahomedan style, neither here, nor elsewhere

¹ A plan of it is given in Lieut. Cole's —correct as far as it goes, but not 'Report on the Buildings near Agra' complete.

throughout the palace, is there a single true arch, the openings being virtually covered by two brackets meeting in the centre.

The general appearance of the arcades of these buildings may be gathered from the annexed view (Woodcut No. 272), and may be characterised as more elegant than rich. The glory of Deeg, however, consists in the cornices, which are generally double, a peculiarity not seen elsewhere, and which for extent of shadow and richness of detail surpass any similar ornaments in India, either in ancient or modern buildings. The lower cornice is the usual sloping entablature, almost universal in such buildings. This was adopted apparently because it



272. View from the Central Pavilion in the Palace at Deeg. (From a Photograph.)

took the slope of the curtains, which almost invariably hang beneath its projecting shade, and which, when drawn out, seem almost a continuation of it. The upper cornice, which was horizontal, is peculiar to Deeg, and seems designed to furnish an extension of the flat roof, which in Eastern palaces is usually considered the best apartment of the house; but whether designed for this or any other purpose, it adds singularly to the richness of the effect, and by the double shadow affords a relief and character seldom exceeded even in the East.

Generally speaking, the bracket *arcades* of Deeg are neither so

rich nor so appropriate as the bold bracket *capitals* of the older styles. That the bracket is almost exclusively an original Indian form of capital can, I think, scarcely be doubted; but the system was carried much further by the Moguls, especially during the reign of Akbar, than it had ever been carried by its original inventors, at least in the North. The Hindus, on receiving it back, luxuriated in its picturesque richness to an extent that astonishes every beholder; and half the effect of most of the modern buildings of India is owing to the bold projecting balconies and fanciful kiosks that diversify the otherwise plain walls.

The greatest defect of the palace is that the style, when it was erected, was losing its true form of lithic propriety. The form of its pillars and their ornaments are better suited for wood or metal than for stone architecture; and though the style of the Moguls, in the last days of their dynasty, was tending in that direction, it never threw off the solidity and constructive propriety to such an extent as is done in these modern palaces of the Hindus. It is not at Deeg carried so far as to be offensive, but it is on the verge of good taste, and in some more modern buildings assumes forms more suited for upholstery than for stone architecture.

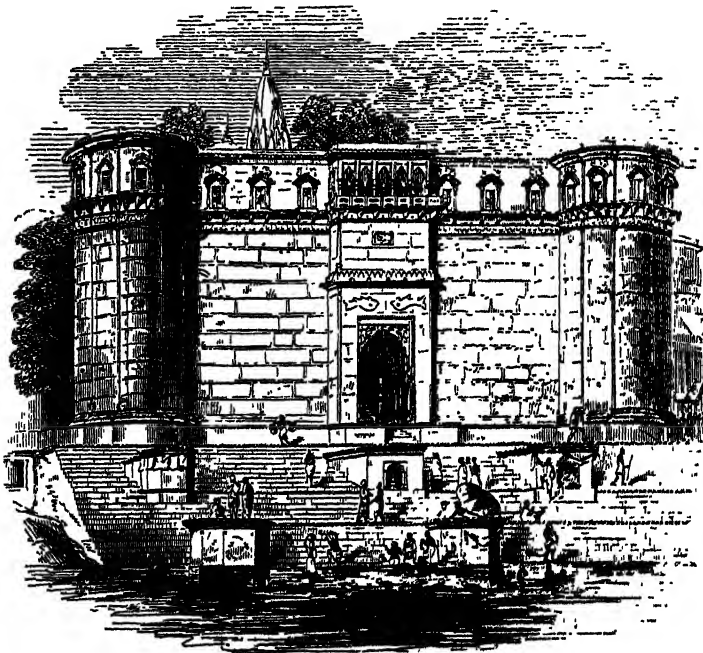
Since the time when Sûraj Mull completed this fairy creation, the tendency, not only with the Rajput princes, but the sovereigns of such states as Oude, and even as Delhi, has been to copy the bastard style of Italian architecture we have introduced into India. It was natural, perhaps, that they should admire the arts of a race who had shown themselves in war and policy superior to themselves; but it was fatal to their arts, and whether a revival is now possible remains to be seen. It might be so, if their rulers showed the smallest possible appreciation of the works of their ancestors, but can hardly be hoped for while a department of the state is organised, as they must believe, for the express purpose of destroying and obliterating all traces of what was once noble and beautiful in the land.

GHÂTS OR LANDING-PLACES.

Another object of architectural magnificence peculiar to northern Hindustan, is the construction of the *ghâts* that everywhere line the river-banks in most of the great cities, more especially those which are situated on the Ganges. Benares possesses perhaps the greatest number of edifices of this class; but from Calcutta to Hurdwar no city is without some specimens of this species of architectural display. The Ghoosla Ghât at Benares (Woodcut No. 273), though one of the most modern, may be taken as a fair specimen of the class, although many are richer and much more elaborately adorned. Their object

being to afford easy access to bathers, the flight of steps in front is in reality the *ghât*, and the main object of the erection. These are generally broken, as in this instance, by small projections, often crowned by kiosks, which take off the monotony inherent in long lines of narrow steps. The flight of stairs is always backed by a building, which in most instances is merely an object of architectural display without any particular destination, except to afford shelter from the rays of the sun to such of the idle as choose to avail themselves of it. When the bank is high, the lower part of these buildings is solid, and when, as in this instance, it is nearly plain, it affords a noble basement to an ornamental upper storey, with which they are generally adorned, or to the temple which frequently crowns them.

Though the Ganges is, *par excellence*, the river of ghâts, one of the most beautiful in India is that erected by Ahalya Baice (Holkar's



widow) at Maheswar, on the Nerbudda ; and Ujjain and other ancient cities almost rival Benares in this respect. Indeed, there is scarcely a tank or stream in all India that is without its flight of steps, and it is seldom indeed that these are left without some adornment or an attempt at architectural display, water being always grateful in so

hot a climate, and an especially favourite resort with a people so fond of washing and so cleanly in their habits as the Hindus.

RÉSERVOIRS.

The same fondness for water has given rise to another species of architectural display peculiar to India, in the great reservoirs or *bowlees*, which are found wherever the wells are deep and water far from the surface. In design they are exactly the reverse of the ghâts, since the steps are wholly below the ground, and descend to the water often at a depth of 80 ft. or 100 ft. Externally they make no display, the only objects usually seen above ground being two pavilions to mark the entrance, between which a bold flight of steps, from 20 ft. to 40 ft. in width, leads down to the water. Facing the entrance is a great screen, rising perpendicularly from the water to the surface of the ground, and dividing the stairs from a circular shaft or well, up which the water is drawn by pulleys by those who prefer that mode of obtaining it instead of descending the steps. The walls between which the steps descend are ornamented by niches, or covered with galleries leading to the great screen. Where the depth is great, there is often a screen across the stairs about half-way down.

To persons not familiar with the East such an architectural object as a bowlee may seem a strange perversion of ingenuity, but the grateful coolness of all subterranean apartments, especially when accompanied by water, and the quiet gloom of these recesses, fully compensate, in the eyes of the Hindu, for the more attractive magnificence of the ghâts. Consequently, the descending flights of which we are now speaking, have often been made more elaborate and expensive pieces of architecture than any of the buildings above ground found in their vicinity.

DAMS.

In the same manner the bunds or dams of the artificial lakes, or great tanks, which are so necessary for irrigation, are often made works of great architectural magnificence, first by covering them with flights of steps, like those of the ghâts, and then erecting temples or pavilions, and kiosks, interspersed with fountains and statues in breaks between these flights. Where all these are of marble, as is sometimes the case in Rajputana, the whole make up as perfect a piece of architectural combination as any the Hindus can boast of.

One of the most beautiful of these is that erected by Raj Sing, who ascended the throne of Oudeypore, in 1653, to form the lake of Rajsamundra (Woodcut No. 274), which is one of the most extensive in his dominions. This bund is 376 paces in length, and wholly

covered with white marble steps; and with its beautiful kiosks projecting into the water, and the palaces which crown the hills at either end, it makes up a fairy scene of architectural beauty, with its waters and its woods, which is hardly surpassed by any in the East.

It would be tedious, however, to enumerate, without illustrating them, which the limits of this work will not permit, all the modes of architectural magnificence of the Hindus. Like all people untrammelled by rules derived from incongruous objects, and gifted with a feeling for the beautiful, they adorn whatever they require, and convert every object, however utilitarian in its purposes, into an



274.

Bund of Lake Rajsamundra. (From a Sketch by the Author.)

object of beauty. They long ago found out that it is not temples and palaces alone that are capable of such display, but that everything which man makes may become beautiful, provided the hand of taste be guided by sound judgment, and that the architect never forgets what the object is, and never conceals the constructive exigencies of the building itself. It is simply this inherent taste and love of beauty, which the Indians seem always to have possessed, directed by unaffected honesty of purpose, which enables those who are destitute of political independence, or knowledge, or power, to erect, even at the present day, buildings that will bear comparison with the best of those erected in Europe during the Middle Ages. It must be confessed that it would require far more comprehensive illustration than

the preceding slight sketch of so extensive a subject can pretend to be, to make this apparent to others. But no one who has personally visited the objects of interest with which India abounds can fail to be struck with the extraordinary elegance of detail and propriety of design which pervades all the architectural achievements of the Hindus ; and this not only in buildings erected in former days, but in those now in course of construction in those parts of the country to which the bad taste of their European rulers has not yet penetrated.

BOOK VII.

INDIAN SARACENIC ARCHITECTURE.



CHAPTER I.

INTRODUCTORY.

FROM a very early period in the world's history a great group of civilized nations existed in Central Asia between the Mediterranean and the Indus. They lived apart, having few relations with their neighbours, except of war and hatred, and served rather to separate than to bring together the Indian and European communities which flourished beyond them on either hand.

Alexander's great raid was the first attempt to break through this barrier, and to join the East and West by commercial or social interchanges. The steady organisation of the Roman empire succeeded in consolidating what that brilliant conqueror had sketched out. During the permanence of her supremacy the space intervening between India and Europe was bridged over by the order she maintained among the various communities established in Central Asia, and there seemed no reason why the intercourse so established should be interrupted. Unsuspected, however, by the Roman world, two nomade nations, uninfluenced by its civilization, hung on either flank of this great line of communication, ready to avail themselves of any moment of weakness that might occur.

The Arabs, as the most impetuous, and nearest the centre, were the first to break their bounds ; and in the course of the 7th century Syria, Persia, Egypt, and the north of Africa became theirs. Spain was conquered, and India nearly shared the same fate. Under Muawiah, the first Khalif of the Ommiads, two attempts were made to cross the Indus by the southern route—that which the Scythians had successfully followed a short time before. Both these attempts failed, but under Walid, Muhamed Kasim, A.H. 99, did effect a settlement in Scinde. It proved a barren conquest, however ; for though a Mahomedan dynasty was established there, it soon became independent of the Khalifat, and eventually died out.

The supremacy of the Khalifat was as brief as it was brilliant. Its hour of greatest glory was about the year A.D. 800, in the reign of Haroun al Rashid. From that time decay set in; and after two centuries more the effeminacy and corruption inherent in Eastern dynasties had so far progressed as to encourage the Northern hordes to move.

During the course of the 11th century the Tartar hordes, who were hitherto only known as shepherds pasturing their herds on the steppes of Northern Asia, first made their appearance south of the Paropamisian range as conquerors; and for six centuries their progress was steadily onwards, till, in the year A.D. 1683, we find the Turks encamped under the walls of Vienna, and the Mogul Aurungzebe lord paramount of the whole of India Proper, while Egypt and all the intervening countries owned the rule of sovereigns of Turanian race.

The architecture of the nations under the Arab Khalifat has already been described, and is of very minor importance.¹ The ruling people were of Semitic race, and had no great taste for architectural magnificence; and unless where they happened to govern a people of another stock, they have left few traces of their art.

With the Northern hordes the case was widely different; they were, without an exception, of Turanian blood, more or less pure, and wherever they went their mosques, and especially their tombs, remain to mark their presence, and to convey an idea of their splendour. In order to understand what follows, it is necessary to bear in mind that the Semitic conquest, from Mecca as a centre, extended from the mouths of the Guadalquivir to those of the Indus, and left but little worthy of remark in architecture. The Turanian conquest, from Bokhara and Balkh as centres, extended from Constantinople to Cuttack, and covered the whole intervening space with monuments of every class. Those of the west and centre have already been described in speaking of Turkey and Persia; the Eastern branch remains to be discussed, and its monuments are those of which this division of the work purports to be a description.

The Saracenic architects showed in India the same pliancy in adopting the styles of the various people among whom they had settled which characterised their practice in the countries already described. It thus happens that in India we have at least twelve or fifteen different styles of Mahomedan architecture: and if an attempt were made to exhaust all the examples, it would be found necessary to enumerate even a greater number. Meanwhile, however, the following thirteen divisions will probably be found sufficient for present purposes:—

¹ Egypt showed little taste for architectural display till she fell under the sway of the Memlook Sultans, and Sara-

cenic architecture in Persia practically commences with the Seljukians.

1. The first of these is that of *Ghazni*, which, though not, strictly speaking, in India, had without doubt the most important influence on the Indian styles, and formed in fact the stepping-stone by means of which the architecture of the West was introduced into India, and it long remained the connecting link between the styles of the Eastern and those of the Western world. It would consequently be of the greatest importance in enabling us to understand the early examples of the style in India Proper, if we could describe this one with anything like precision, but for that we must wait till some qualified person visits the province.

2. Next to this comes the *Pathan* style of northern India (A.D. 1193–1554), spreading over the whole of Upper India, and lasting for about three centuries and a half. After the death, however, of Ala-ud-din (A.D. 1316) the central power was at times so weak, that the recently conquered outlying provinces were frequently enabled to render themselves independent, and when this was the case, exhibited their individuality everywhere, by inventing a style of architecture expressive of their local peculiarities.

3. One of the first to exhibit this tendency was the brilliant but short-lived Sharki dynasty of *Jaunpore* (A.D. 1394–1476). Though existing for less than a century, they adorned their capital with a series of mosques and other buildings which are hardly surpassed by those of any city in India for magnificence, and by none for a well-marked individuality of treatment.

4. The style adopted by the kings of *Gujerat* during their period of independence (A.D. 1396–1572) was richer and more varied than that of Jaunpore, though hardly so original or marked by such individuality. They borrowed too much, physically as well as intellectually, from the architecture of the Jains, among whom they were located, to be entirely independent; but the richness of their style is in proportion to the Hindu details they introduced.

5. *Mahwa* became independent in A.D. 1401, and between that date and A.D. 1568, when they were absorbed in the Mogul empire, her kings adorned their capital at Mandu with palaces and mosques of great magnificence, but more similar to the parent style at Delhi than the two last-named styles, and wanting, consequently, in the local individuality.

6. Bengal was early erected into a separate kingdom—in A.D. 1203—more or less independent of the central power; and during its continuance—till A.D. 1573—the capitals, *Gaur* and *Maldah*, were adorned with many splendid edifices. Generally these were in brick, and are now so overgrown by jungle as to be either ruined or nearly invisible. They are singularly picturesque, however, and display all the features of a strongly-marked individuality of style.

These six divisions are probably sufficient to characterise the

Mahomedan styles north of the Nerbudda. To the south of that river there are three well-marked styles.

7. First that of the *Bahmani* dynasty. First at Kalbergah, A.D. 1347, and afterwards at Bidar, A.D. 1426, they adorned their capitals with edifices of great magnificence and well-marked individuality, before they were absorbed, in A.D. 1525, in the great Mogul empire.

8. Next to these was the still more celebrated Adil Shahi dynasty of *Bijapur* (A.D. 1489-1660). Their style differed most essentially from all those above enumerated, and was marked by a grandeur of conception and boldness in construction unequalled by any edifices erected in India.

9. The third southern style is that of the Kutub Shahi dynasty of *Golconda*, A.D. 1512-1672. Their tombs are splendid, and form one of the most striking groups in India, but show evident signs of a decadence that was too surely invading art at the age when they were erected.

10. One by one all these brilliant individualities were absorbed in the great *Mogul* empire, founded by Baber, A.D. 1494, and which, though practically perishing on the death of Aurungzebe, A.D. 1706, may be considered as existing till the middle of the last century, A.D. 1750. It is to this dynasty that Agra, Delhi, and most of the towns in northern India owe their most splendid edifices.

11. Before leaving this branch of the subject, it may be expedient to enumerate the style of Moslem art existing in *Scinde*. Practically, it is Persian both in its form and the style of decoration, and must have existed in this province from a very ancient time. All the examples, however, now known of it are comparatively modern, and bring us back, curiously enough, to the neighbourhood of Ghazni, from which we started in our enumeration.

12. Leaving these, which may be called the true styles of Mahomedan architecture, we have two which may be designated as the bastard styles. The first of these is that of *Oude* (A.D. 1756-1847). In its capital there are ranges of building equal in extent and richness to those of any of the capitals above enumerated, but degraded in taste to an extent it is hardly possible to credit in a people who so shortly before had shown themselves capable of such noble aspirations.

13. The style adopted by the short-lived dynasty of *Mysore* (A.D. 1760-1799), being further removed from the influences of European vulgarity, is not so degraded as that of Lucknow, but is poor and inartistic when compared with earlier styles.

In an exhaustive treatise on the subject, the styles of Ahmednugger and Arungabad, A.D. 1490-1707, ought, perhaps, to be enumerated, and some minor styles elsewhere. These have not, however, sufficient individuality to deserve being erected into separate styles,

and the amount of illustration that can be introduced into a work like the present is not sufficient to render the differences sensible to those who are not personally acquainted with the examples.

Even as it is, it would require a much more extensive series of illustrations than that here given to make even their most marked merits or peculiarities evident to those who have no other means than what such a work as this affords of forming an opinion regarding them. Each of these thirteen styles deserves a monograph; but, except for Bijapur¹ and Ahmedabad,² nothing of the sort has yet been attempted, and even the two works in which this has been attempted for these two capitals by no means exhaust the materials available for the purpose. Let us hope that these deficiencies will be supplied, and the others undertaken before long and before it is too late, for the buildings are fast perishing from the ravages of time and climate and the still more destructive exigences of the present governing power in India.

¹ 'Architecture of Beejapore. Photographed from Drawings by Capt. Hart and A. Cumming, C.E., and on the spot by Col. Biggs and Major Loch, with text by Col. Meadows Taylor and J. Fergus-

son.' Folio, Murray, 1866.

² 'Architecture of Ahmedabad. 120 Photographs by Col. Biggs, with Text by T. C. Hope, B.C.S. and Jas. Ferguson.' Small folio, Murray, 1866.

CHAPTER II

GHAZNI.

CONTENTS.

Tomb of Mahmūd—Gates of Somnath—Minars on the Plain.

CHRONOLOGY.

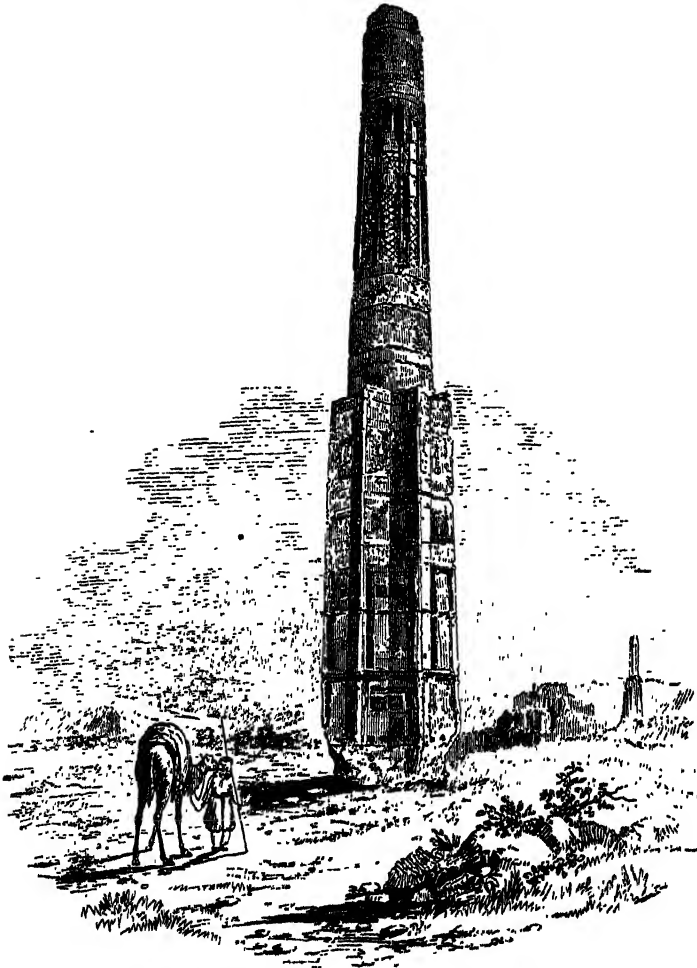
Sabuktagin, founder	A.D. 975	Abdul-rashid	A.D. 1043
Mahmūd	977	Ibrahim	1054
Masūd	1030	Shahab ud-din (first of Ghori dynasty)	1139

TOWARDS the latter part of the 9th century the power of the Khalifs of Bagdad was sinking into that state of rapid decline which is the fate of all Eastern dynasties. During the reign of Al Motamed, A.D. 870–891, Egypt became independent, and the northern province of Bokhara threw off the yoke under the governor appointed by the Khalif, Nasr ben Ahmed, a descendant of Saman, a robber chief, who declared and maintained his independence, and so formed the Samanian dynasty. After the dynasty had existed about a century, Sabuktagin, a Turkish slave belonging to a general of one of the last of the Samanian kings, rendered himself also independent of his master, and established himself in Ghazni, of which he was governor, founding the well-known dynasty of Ghaznavides. His successor, Mahmūd, A.D. 977–1030, is one of the best-known kings in Indian history owing to his brilliant campaigns in India, and more especially that in which he destroyed the celebrated temple of Somnath.

On his return from an earlier campaign, in which he had sacked the town of Muttra, we learn from Ferishta that the king ordered a magnificent mosque to be built of marble and granite, afterwards known by the name of the Celestial Bride. Near it he founded a university. When the nobility of Ghazni perceived the taste of their king in architecture, they also endeavoured to vie with one another in the magnificence of their palaces, as well as in the public buildings which were raised for the embellishment of the city. "Thus," continues the historian, "the capital was in a short time ornamented with mosques, porches, fountains, aqueducts, reservoirs, and cisterns, beyond any city in the East."¹

¹ Brigg's translation, vol. i. p. 61.

The plain of Ghazni still shows the remains of this splendour; and, in the dearth of information regarding Persian art of that age, an account of it would be one of the most interesting and valuable



275.

Minar at Ghazni. (From a Drawing by G. T. Vigne, Esq.)

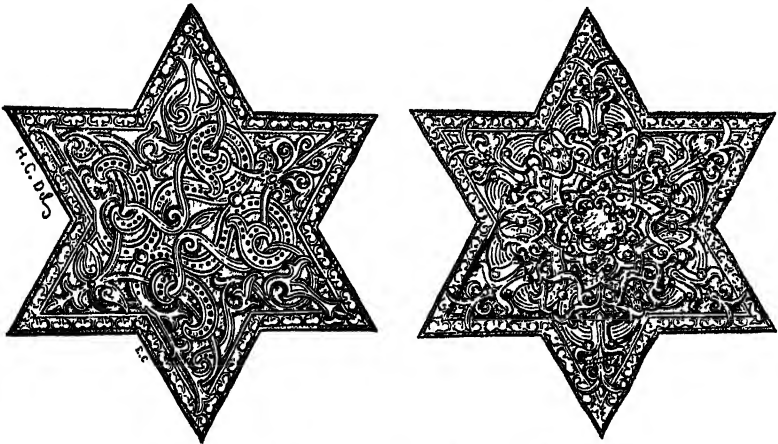
pieces of information we could receive. These ruins, however, have not been as yet either examined or described;¹ and even the tomb of

¹ It is very much to be regretted that, is to be hoped, if an opportunity should not a single officer accompanied our again occur, that their importance to the armies, when they passed and repassed history of art in the East will not be through Ghazni, able or willing to appreciate the interest of these ruins; and it overlooked.

the Great Mahmúd is unknown to us except by name,¹ notwithstanding the celebrity it acquired from the removal of its gates to India at the termination of our disastrous campaigns in that country.

The gates are of Deodar pine,² and the carved ornaments on them are so similar to those found at Cairo, on the mosque of Ebn Touloun and other buildings of that age, as not only to prove that they are of the same date, but also to show how similar were the modes of decoration at these two extremities of the Moslem empire at the time of their execution.

At the same time there is nothing in their style of ornamentation that at all resembles anything found in any Hindu temple, either of their age or at any other time. There is, in fact, no reason for doubting that these gates were made for the place where they were found.³ If any other parts of the tomb are ornamented in the same style, it



276.

Ornaments from the Tomb of Mahmúd at Ghazni.

would be of great interest to have them drawn. It probably is, however, from the Jumma Musjid that we shall obtain the best picture of the arts of that day, when any one will take the trouble of examining it.

Two minars still adorn the plain outside the city, and form, if not the most striking, at least the most prominent of the ruins of that

¹ The sketch of the tomb published by Mr. Vigne in his 'Travels in Afghanistan,' gives too confined a portion of it to enable us to judge either of its form or detail. The gate in front is probably modern, and the foiled arches in the background appear to be the only parts that belong to the 11th century

² The tradition that these gates were

of sandal-wood, and brought from Somnath, is entirely disproved by the fact of their being of the local pine-wood, as well as by the style of decoration, which has no resemblance to Hindu work.

³ An excellent representation of the gates will be found in the second edition of 'Marco Polo's Travels,' by Col. Yule, vol. ii. p. 390.

city. Neither of them was ever attached to a mosque; they are, indeed, pillars of victory, or *Jaya Stambhas*, like those at Chittore and elsewhere in India, and are such as we might expect to find in a country so long Buddhist. One of them was erected by Mahmūd himself; the other was built, or at least finished, by Masūd, one of his immediate successors.¹

The lower part of these towers is of a star-like form—the plan being apparently formed by placing two squares diagonally the one over the other. The upper part, rising to the height of about 140 ft. from the ground, is circular; both are of brickwork, covered with ornaments of terra-cotta of extreme elaboration and beauty, and retaining their sharpness to the present day.

Several other minars of the same class are found further west, even as far as the roots of the Caucasus,² which, like these, were pillars of victory, erected by the conquerors on their battle-fields. None of them have the same architectural merit as those of Ghazni, at least in their present state, though it may be that their ornaments, having been in stucco or some perishable material, have disappeared, leaving us now only the skeleton of what they were.

The weakness of Mahmūd's successors left the Indians in repose for more than a century and a half; and, like all Eastern dynasties, the Ghaznavides were gradually sinking to inevitable decay, when their fall was precipitated by the crimes of one of them, which were fearfully avenged by the destruction of their empire and capital by Ala ud-dīn, and their race was at length superseded by that of the Ghori, in the person of Shahab ud-dīn, in the year 1183.

Though centuries of misrule have weighed on this country since the time of the Ghaznavides, it is scarcely probable that all traces of their magnificence have passed away; but till their cities are examined by some one competent to discriminate between what is good or bad, or old or new, we must be content merely to indicate the position of the style, leaving this chapter to be written hereafter when the requisite information shall have been obtained. In the meanwhile it is satisfactory to know that between Herat and the Indus there do exist a sufficient number of monuments to enable us to connect the styles of the West with those in the East. They have been casually described by travellers, but not in such a manner as to render them available for our purposes; and in the present unsettled state of the country it may be some time yet before their elucidation can be accomplished.

¹ See translation of the inscription on these minars, 'Journal of the Asiatic Society of Bengal,' No. 184, for 1843.

² Two are represented by Dubois de Montpéreux, 'Voyage autour du Caucase.'

CHAPTER III.

PATHAN STYLE.

CONTENTS.

Mosque at Old Delhi—Kutub Minar—Tomb of Ala ud-din—Pathan Tombs—
Ornamentation of Pathan Tombs.

CHRONOLOGY.

Shahab ud-din Ghorî	A.D. 1192	Nasar ud-din last of the Khiljis	A.D. 1383
Kutub ud-din IbeK.	1006	Khyer Khan under Tamerlane	1414
Shum ud-din Altumsh		Behloli Lodi.	1450
Ala ud-din Khilji		Shera Shah	1510
Tugluck Shah		Sekunder defeated by Akbar.	1554

WITH all the vigour of a new race, the Ghorians set about the conquest of India. After sustaining a defeat in the year 1191, Shahab ud-din again entered India in A.D. 1193, when he attacked and defeated Prithiraj of Delhi. This success was followed by the conquest of Canouge in A.D. 1194; and after the fall of these two, the capitals of the greatest empires in the peninsula, India may be said to have been conquered before his death, which happened in A.D. 1206.

At his death his great empire fell to pieces, and India fell to the share of Kutub ud-din IbeK. This prince was originally a Tûrkish slave, who afterwards became one of Shahab ud-din's generals and contributed greatly by his talents and military skill to the success of his master. He and his successor, Altumsh, continued nobly the work so successfully begun, and before the death of the latter, in A.D. 1235, the empire of northern India had permanently passed from the hands of the Hindus to those of their Mahomedan conquerors.

For a century and a half after the conquest the empire continued a united whole, under Tûrkish, or, as they are usually called, Pathan dynasties. These monarchs exhibited a continued vigour and energy very unusual in the East, and not only sustained and consolidated, but increased by successive conquests from the infidels, that newly-acquired accession to the dominions of the faithful, and during that time Delhi continued practically the capital of this great empire. In the latter half, however, of the 14th century, symptoms of disintegration manifested themselves. One after another the governors of distant provinces reared the standard of revolt, and successfully established

independent kingdoms, rivalling the parent state in power and in the splendour of their capitals. Still Delhi remained the nominal head at least of this confederation of states—if it may be so called—till the time when Baber (A.D. 1494), the fourth in descent from Tamerlane, invaded Hindustan. He put an end to the Pathan sway, after it had lasted for three centuries and a half, and finally succeeded in establishing the celebrated dynasty of the Moguls, which during six successive reigns, extending over the extraordinary period of more than two centuries (A.D. 1494–1707), reconsolidated the Moslem empire into one great whole, which reached a degree of splendour and of power almost unknown in the East.

Nothing could be more brilliant, and at the same time more characteristic, than the commencement of the architectural career of these Pathans in India. So soon as they felt themselves at all sure of their conquest, they set to work to erect two great mosques in their two principal capitals of Ajmir and Delhi, of such magnificence as should redound to the glory of their religion and mark their triumph over the idolators. A nation of soldiers equipped for conquest, and that only, they had of course brought with them neither artists nor architects, but, like all nations of Turanian origin, they had strong architectural instincts, and having a style of their own, they could hardly go wrong in any architectural project they might attempt. At the same time, they found among their new subjects an infinite number of artists quite capable of carrying out any design that might be propounded to them.

In the first place, they found in the colonnaded courts of the Jaina temples nearly all that was wanted for a ready-made mosque. All that was required was the removal of the temple in its centre, and the erection of a new wall on the west side, adorned with niches—mihirabs—to point out to the faithful the direction in which Mecca lay, towards which, as is well known, they were commanded in the Koran to turn when they prayed. It is not certain, however, that they were ever in India content with this only. In the two instances at least to which we are now referring, they determined in addition to erect a screen of arches in front of the Jaina pillars, and to adorn it with all the richness and elaboration of carving which their Indian subjects were capable of executing. Nothing could be more successful than the results. There is a largeness and grandeur about the plain simple outline of the Mahomedan arches which quite overshadows the smaller parts of the Hindu fane, and at the same time the ornamentation, though applied to a greater extent than in any other known examples, is kept so flat as never to interfere with or break the simple outlines of the architectural construction. There may be other examples of surface-decoration as elaborate as this, but hardly anywhere on such a scale. Some parts of the interior of Sta. Sophia at Constantinople

are as beautiful,¹ but they are only a few square yards. The palace at Meshita, if completed, might have rivalled it, but it is a fragment :² and there may be—certainly were—examples in Persia between the times of Chosroes and Harun al-Rashid, which may have equalled these, but they have perished, or at least are not known to us now ; and even if they ever existed, must have been unlike these mosques. In them we find a curious exemplification of some of the best qualities of the art, as exhibited previously by the Hindus, and practised afterwards by their conquerors.

DELHI.

Of the two mosques at Delhi and at Ajmir, the first named is the earlier, having been begun some seven or eight years before the other, and is also very much the larger.³ It is, besides, associated with the Kutub Minar, and some of the most beautiful tombs of the age, which altogether make up a group with which nothing at Ajmir can compare. The situation, too, of the Delhi ruins is singularly beautiful, for they stand on the gentle slope of a hill, overlooking a plain that had once apparently been a lake, but which afterwards became the site of three successive capitals of the East. In front are the ruins of Tugluckabad, the gigantic fort of an old Pathan chief ; and further north the plain is still covered with the ruins of Old Delhi, the capital of the later Pathans and earlier Moguls. Beyond that, at the distance of nine or ten miles, are seen the towers of Shahjehanabad, the modern capital, and till recently the seat of the nominal monarchy of the Great Mogul. Still further north are situated the civil stations and cantonments of the British rulers of the country. It is a fortunate circumstance that the British station was not, as at Agra, placed in the midst of the ruins, since it is to this that we owe their preservation. But for the distance, marble columns would doubtless have been taken for all purposes for which they might have been available, with a total disregard to their beauty, and the interest of the ruins thereby annihilated. Even as it is, the buildings belonging to the celebrated Shahlimar gardens, which were the only buildings of importance in the neighbourhood of the English station, have

¹ *Vide ante*, vol. ii. p. 444, *et seqq.*

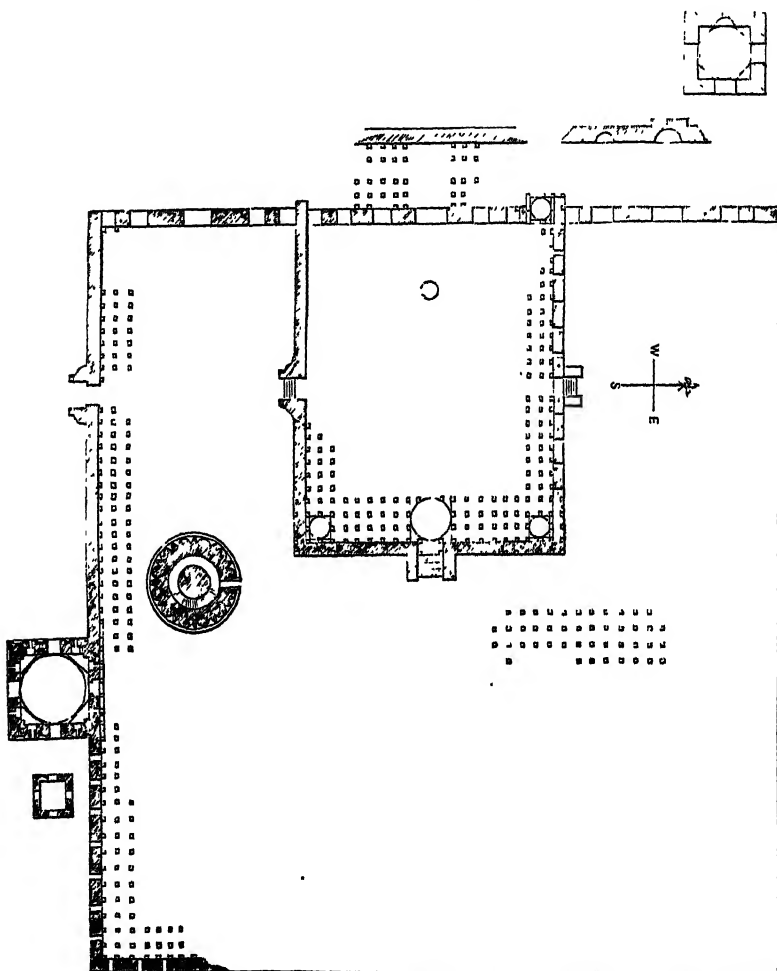
² *Vide ante*, vol. i. p. 387, *et seqq.*

³ I do not know why Gen. Cunningham should go out of his way to prove that the Ajmir mosque is larger than that at Delhi ('Archæological Reports,' vol. ii. p. 260). His remarks apply only to the inner court at Delhi, which may have been the whole mosque as originally de-

signed ; but before the death of Altumsh, who was the real builder of both, the screen of arches at Delhi had been extended to 380 ft. as compared with the 200 ft. at Ajmir, and the courtyards of the two mosques are nearly in the same proportion, their whole superficial area being 72,000 ft. at Ajmir, as compared with 152,000 ft. at Delhi.

disappeared; but these are of slight importance as compared with the ruins further south.

The general arrangement of the principal ruins will be understood from the plan (Woodcut No. 277), which was taken with great care, though the scale to which it has been necessary to reduce it prevents



277. Plan of Ruins in Old Delhi. (From a Plan by the Author.) Scale 100 ft. to 1 in.

all its peculiarities from being seen. To understand it, it is necessary to bear in mind that all the pillars are of Hindu, and all the walls of Mahomedan, architecture.

It is a little difficult to determine to what extent the pillars now stand as originally arranged by the Hindus, or how far they have been taken down and re-arranged by the conquerors. Even supposing

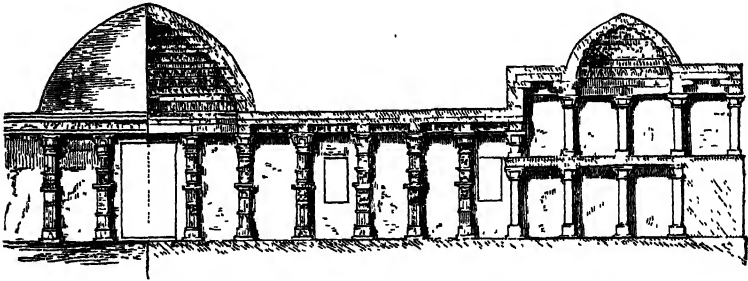
them to be undisturbed, it is quite evident that the enclosing walls were erected by the Moslems, since all the stringcourses are covered with ornaments in their style, and all the openings possess pointed arches, which the Hindus never used. On the whole the probability seems to be that the entire structure was re-arranged in the form we now see it by the Mahomedans. The celebrated mosque at Canouge is undoubtedly a Jaina temple, re-arranged on a plan precisely similar to that of the mosque of Amron at Old Cairo (Woodcut No. 921, vol. ii.). The roof and domes are all of Jaina architecture, so that no trace of the Moorish style is to be seen internally; but the exterior is as purely of Mahomedan architecture. There is another mosque at Dhar, near Mandu, of more modern date, and, without doubt, a re-arrangement of a Jaina temple. Another, in the fort at Jaunpore, as well as many other mosques at Ahmedabad and elsewhere, all show the same system of taking down and re-arranging the materials on a different plan. If, therefore, the pillars at the Kutub were *in situ*, the case would be exceptional;¹ but I cannot, nevertheless, help suspecting that the two-storeyed pavilions in the angles, and those behind the screen may be as originally erected, and some of the others may be so also; but to this we will return when speaking of the Ajmir mosque, where the Jaina pillars are almost certainly as first arranged. It is quite certain, however, that some of the pillars at the Kutub are made up of dissimilar fragments, and were placed where they now stand by the builders of the mosque. The only question—and it is not a very important one—is, how many were so treated? It may, however, be necessary to explain that there could be no difficulty in taking down and rebuilding these erections, because the joints of the pillars are all fitted with the precision that Hindu patience alone could give. Each compartment of the roof is composed of nine stones—four architraves, four angular and one central slab (as explained in diagram No. 114, p. 214), all so exactly fitted, and so independent of cement, as easily to be taken down and put up again. The same is true of the domes, all which being honestly and fairly fitted, would suffer no damage from the process of removal and re-erection.

The section (Woodcut No. 278), of one half of the principal colonnade (the one facing the great series of arches) will explain its

¹ Gen. Cunningham found an inscription on the wall recording that twenty-seven temples of the Hindus had been pulled down to provide materials for this mosque ('Archæological Reports,' vol. i. p. 176). This, however, proves little, unless we know what the temples were like which were destroyed for this purpose. Twenty-seven temples like those

at Khajurâho, excepting the Ganthai, would not provide pillars for one half the inner court. One temple like that at Sadri would supply a sufficiency for the whole mosque, and though the latter is more modern, we have no reason for supposing that similar temples may not have existed before Mahomedan times.

form better than words can do. It is so purely Jaina, that it should, perhaps, have been mentioned in speaking of that style; but as



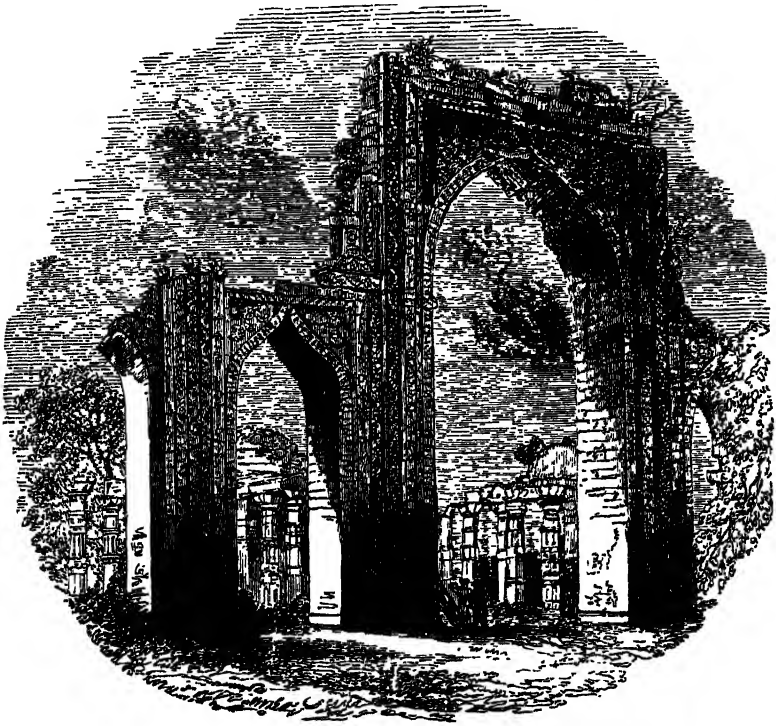
278. Section of part of East Colonnade at the Kutub, Old Delhi. Scale 25 ft to 1 in.

forming a part of the earliest mosque in India, it is more appropriately introduced in this place. The pillars are of the same order as those used on Mount Abu (Woodcut No. 130), except that those at Delhi are much richer and more elaborate. Most of them probably belong to the 11th or 12th century, and are among the few specimens to be found in India that seem to be overloaded with ornament. There is not one inch of plain surface from the capital to the base, except the pillars behind the screen and some others which may belong to older buildings. Still the ornament is so sharp and so cleverly executed, and the effect, in their present state of decay and ruin so picturesque, that it is very difficult to find fault with what is so beautiful. In some instances the figures that were on the shafts of the pillars have been cut off, as offensive to Mahomedan strictness with regard to idolatrous images; but on the roof and less seen parts, the cross-legged figures of the Jaina saints, and other emblems of that religion, may still be detected.

The glory of the mosque, however, is not in these Hindu remains, but in the great range of arches on the western side, extending north and south for about 385 ft., and consisting of three greater and eight smaller arches; the central one 22 ft. wide and 53 ft. high; the larger side-arches 24 ft. 4 in., and about the same height as the central arch; the smaller arches, which are unfortunately much ruined, are about half these dimensions (Woodcut No. 279). Behind this, at the distance of 32 ft., are the foundations of another wall; but only intended, apparently, to be carried as high as the roof of the Hindu pillars it encloses. It seems probable that the Hindu pillars between the two screens were the only part proposed to be roofed, since some of them are built into the back part of the great arches, and all above them is quite plain and smooth, without the least trace of any intention to construct a vault or roof of any sort. Indeed, a roof is by no means an essential part of a mosque; a wall facing Mecca is all that

is required, and in India is frequently all that is built, though an enclosure is often added in front to protect the worshippers from interruption. Roofed colonnades are, of course, convenient and ornamental accompaniments, yet far from being indispensable.

The history of this mosque, as told in its construction, is as curious as anything about it. It seems that the Afghan conquerors had a tolerably distinct idea that pointed arches were the true form for architectural openings; but, being without science sufficient to



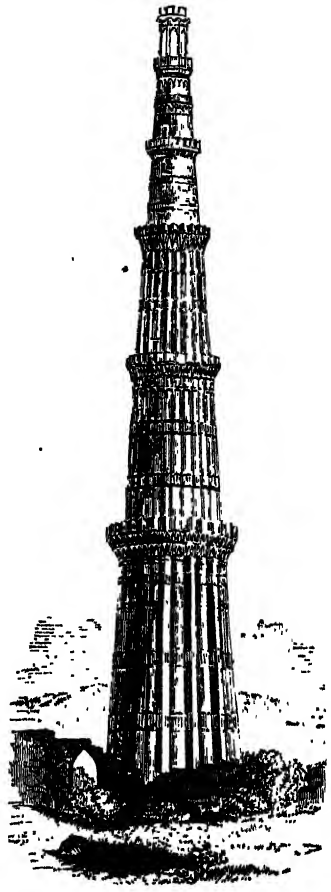
279 Central Range of Arches at the Kutub. (From a Sketch by the Author.)

construct them, they left the Hindu architects and builders whom they employed to follow their own devices as to the mode of carrying out the form. The Hindus up to this time had never built arches—nor, indeed, did they for centuries afterwards. Accordingly, they proceeded to make the pointed openings on the same principle upon which they built their domes. They carried them up in horizontal courses as far as they could, and then closed them by long slabs meeting at the top, the construction being, in fact, that of the arch of the aqueduct at Tusculum, shown in Woodcut No. 178, vol. i.¹ The

¹ This mode of construction is only feasible when much larger stones are used

same architects were employed by their masters to ornament the faces of these arches; and this they did by copying and repeating the ornaments on the pillars and friezes on the opposite sides of the court, covering the whole with a lace-work of intricate and delicate carving, such as no other mosque except that at Ajmir ever received before or since; and which—though perhaps in a great measure thrown away when used on such a scale—is, without exception, the most exquisite specimen of its class known to exist anywhere. The stone being particularly hard and good, the carving retains its freshness to the present day, and is only destroyed above the arches, where the faulty Hindu construction has superinduced premature decay.

The Kutub Minar, or great minaret, is 48 ft. 4 in. in diameter at the base, and, when measured in 1794, was 242 ft. in height.¹ Even then, however, its capital was ruined, so that some 10 ft., or perhaps 20 ft., must be added to this to complete its original elevation. It is ornamented by four boldly-projecting balconies; one at 97 ft., the second at 148 ft., the third at 188 ft., and the fourth at 214 ft. from the ground; between which are richly-sculptured raised belts containing inscriptions. In the lower storey the projecting ribs which form the flutes are alternately angular and circular; in the second circular and in the third angular only. Above this the minar is plain, and principally of white marble, with bolts of the same red sandstone of which the three lower storeys are composed (Woodcut No. 280).



280. Minar of Kutub.
(From a Sketch by the Author.)

than were here employed. The consequence was that the arch had become seriously crippled when I saw and sketched it. It has since been carefully restored by Government under efficient superintendence, and is now as sound and complete as when first erected. The two great side arches either were never completed,

or have fallen down in consequence of the false mode of construction.

¹ 'Asiatic Researches,' vol. iv. p. 313. Its present height, according to Gen. Cunningham, is (after the removal of the modern pavilion) 238 ft. 1 in. ('Archaeological Reports,' vol. i. p. 196).

It is not clear whether the angular flutings are copied from some peculiarity found in the minarets at Khorasan and further westward, or whether they are derived from the forms of the temples of the Jains. The forms of the bases of the minarets at Ghazni appear to lend probability to the first hypothesis; but the star-like form of many temples—principally Jaina—in Mysore and elsewhere (*ante*, p. 394, *et seqq.*) would seem to countenance the idea of their being of Hindu origin. No star-like forms have yet, however, been found so far north, and their destruction has been too complete for us to hope that they may be found now. Be this as it may, it is probably not too much to assert that the Kutub Minar is the most beautiful example of its class known to exist anywhere. The rival that will occur at once to most people is the campanile at Florence, built by Giotto. That is, it is true, 30 ft. taller, but it is crushed by the mass of the cathedral alongside; and, beautiful though it is, it wants that poetry of design and exquisite finish of detail which marks every moulding of the minar. It might have been better if the slope of the sides had been at a higher angle, but that is only apparent when seen at a distance; when viewed from the court of the mosque its form is perfect, and, under any aspect, is preferable to the prosaic squareness of the outline of the Italian example.

The only Mahomedan building known to be taller than this is the minaret of the mosque of Hassan, at Cairo (p. 389 and Woodcut No. 928, vol. ii.); but as the pillar at Old Delhi is a wholly independent building, it has a far nobler appearance, and both in design and finish far surpasses not only its Egyptian rival, but any building of its class known to me in the whole world. This, however, must not be looked at as if erected for the same purposes as those usually attached to mosques elsewhere. It was not designed as a place from which the müeddin should call the prayers, though its lower gallery may have been used for that purpose also, but as a Tower of Victory—a Jaya Stambha, in fact—an emblem of conquest, which the Hindus could only too easily understand and appreciate.

At the distance of 470 ft. north of this one a second minar was commenced, by Ala ud-dîn, of twice its dimensions, or 297 ft. in circumference. It was only carried up to the height of 40 ft., and abandoned probably in consequence of the removal of the seat of government to the new capital of Tugluckabad.

The date of all these buildings is known with sufficient exactness from the inscriptions which they bear,¹ from which it appears that the inner court was enclosed by Shahab ud-dîn. The central range of arches (Woodcut No. 279) was built by Kutub ud-dîn; the wings

¹ Translated by Walter Ewer, 'Asiatic Researches,' vol. xiv. p. 480. See also Cunningham, 'Archæological Reports,' vol. i. p. 132. *et seqq.*

tained to be only 20 in., the total height is 23 ft. 8 in.¹ Its diameter at the base is 16·4 in., at the capital 12·05 in. The capital is 3½ ft. high, and is sharply and clearly wrought into the Persian form that makes it look as if it belonged to an earlier period than it does; and it has the amalaka moulding, which is indicative of considerable antiquity. It has not, however, been yet correctly ascertained what its age really is. There is an inscription upon it, but without a date. From the form of its alphabet, Prinsep ascribed it to the 3rd or 4th century;² Bhanu Daji, on the same evidence, to the end of the 5th or beginning of the 6th century.³ The truth probably lies between the two. My own conviction is that it belongs to one of the Chandra Rajas of the Gupta dynasty, either consequently to A.D. 363 or A.D. 400.

Taking A.D. 400 as a mean date—and it certainly is not far from the truth—it opens our eyes to an unsuspected state of affairs to find the Hindus at that age capable of forging a bar of iron larger than any that have been forged even in Europe up to a very late date, and not frequently even now. As we find them, however, a few centuries afterwards using bars as long as this *lât* in roofing the porch of the temple at Kanaruc (*ante*, p. 222), we must now believe that they were much more familiar with the use of this metal than they afterwards became. It is almost equally startling to find that, after an exposure to wind and rain for fourteen centuries, it is unruined, and the capital and inscription are as clear and as sharp now as when put up fourteen centuries ago.⁴

As the inscription informs us the pillar was dedicated to Vishnu,

¹ It is a curious illustration how difficult it sometimes is to obtain correct information in India, that when Gen. Cunningham published his 'Reports' in 1871, he stated, apparently on the authority of Mr. Cooper, Deputy Commissioner, that an excavation had been carried down to a depth of 26 ft., but without reaching the bottom. "The man in charge, however"—*témoin oculaire*—"assured him that the actual depth reached was 35 ft."—Vol. i. p. 169. He consequently estimated the whole length at 60 ft., but fortunately ordered a new excavation, determined to reach the bottom—*coûte qui coûte*—and found it at 20 inches below the surface.—Vol. iv. p. 28, pl. 5. At a distance of a few inches below the surface it expands in a bulbous form to a diameter of 2 ft. 4 in., and rests on a gridiron of iron bars, which are fastened with lead into the

stone pavement.

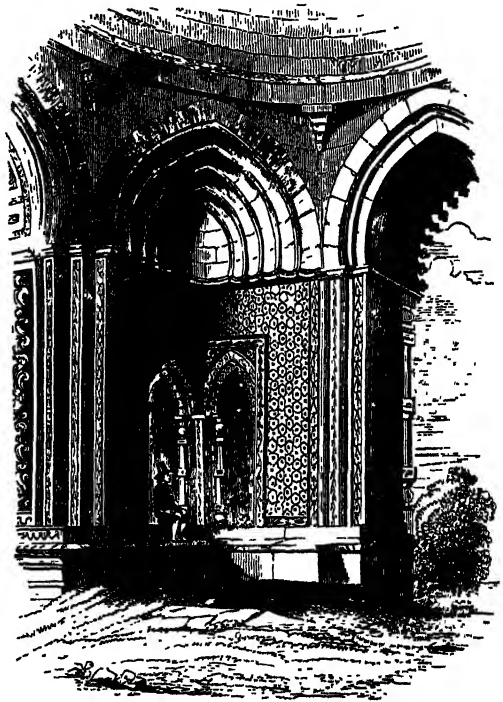
² 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 629.

³ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. x. p. 64. These two translations are painfully discrepant in detail, though agreeing sufficiently as to the main facts. On the whole, I am inclined to think Bhanu Daji's the most correct, though I agree with Prinsep in believing that the more archaic form of the letters is owing to their being punched with a cold chisel on the iron, instead of being engraved as those on stone always were.

⁴ There is no mistake about the pillar being of pure iron. Gen. Cunningham had a bit of it analysed in India by Dr. Murray, and another portion was analysed in the School of Mines here by Dr. Percy. Both found it pure malleable iron without any alloy.

there is little doubt that it originally supported a figure of Garuda on the summit which the Mahomedans of course removed; but the real object of its erection was as a pillar of victory to record the "defeat of the Balhikas,¹ near the seven mouths of the Sindhu," or Indus. It is, to say the least of it, a curious coincidence, that eight centuries afterwards men from that same Bactrian country should have erected a Jaya Stambha ten times as tall as this one, in the same courtyard, to celebrate their victory over the descendants of those Hindus who so long before had expelled their ancestors from the country.

Immediately behind the north-west corner of the mosque stands the tomb of Altumsh, the founder. Though small, it is one of the richest examples of Hindu art applied to Mahomedan purposes that Old Delhi affords, and is extremely beautiful, though the builders still display a certain degree of inaptness in fitting the details to their new purposes. The effect at present is injured by the want of a roof, which, judging from appearance, was never completed, if ever commenced. In addition to the beauty of its details it is interesting as being the oldest tomb known to exist in India. He died A.D. 1236.



232. Interior of a Tomb at Old Delhi. (From a Sketch by the Author.)

A more beautiful example than even this is the other, shown on the left hand of the plan (Woodcut No. 277). It was erected by Ala ud-din Khilji, and the date 1310 is found among its inscriptions. It is therefore about

¹ Can these Balhikas be the dynasty we have hitherto known as the Sah kings of Saurashtra? They certainly were settled on the lower Indus from about the year A.D. 79, and were expelled, according to their own dates, A.D. 264 or 371. (See

'Journal Bombay Branch of the Royal Asiatic Society,' vol. viii. p. 28.) My impression is, that this may ultimately prove to be the true solution of the riddle.

a century more modern than the other buildings of the place, and displays the Pathan style at its period of greatest perfection, when the Hindu masons had learned to fit their exquisite style of decoration to the forms of their foreign masters. Its walls are decorated internally with a diaper pattern of unrivalled excellence, and the mode in which the square is changed into an octagon is more simply elegant and appropriate than any other example I am acquainted with in India. The pendentives accord perfectly with the pointed openings in the four other faces, and are in every respect appropriately constructive.¹ True, there are defects. For instance, they are rather too plain for the elaborate diapering which covers the whole of the lower part of the building both internally and externally; but ornament might easily have been added; and their plainness accords with the simplicity of the dome, which is indeed by no means worthy of the substructure. Not being pierced with windows, it seems as if the architect assumed that its plainness would not be detected in the gloom that in consequence prevails.

This building, though small—it is only 53 ft. square externally, and with an internal apartment only 34 ft. 6 in. in plan—marks the culminating point of the Pathan style in Delhi. Nothing so complete had been done before, nothing so ornate was attempted by them afterwards. In the provinces wonderful buildings were erected between this period and the Mogul conquest, but in the capital their edifices were more marked by solemn gloom and nakedness than by ornamentation or any of the higher graces of architectural art. Externally it is a good deal damaged, but its effect is still equal to that of any building of its class in India.

AJMIR.

The mosque at Ajmir (Woodcut No. 283) was commenced apparently in the year 1200 and was certainly completed during the reign of Altumsh, A.D. 1211–1236.² According to tradition, it was finished in two days and a half; hence the only name by which it is now known—the “Arhai dîn ka Jhompra,” which, if it means anything, can only apply to the clearing away of the Pagan temples and symbols, and the dedication of a heathen shrine to purposes of the Faithful. In this instance it seems almost certain, whatever may be the case at Delhi, that the pillars are *in situ*. At all events, if they were taken down by the Mahomedans, they certainly have been re-erected exactly as they were originally designed to stand.³ The pillars, their archi-

¹ The same form of pendentive is found at Serbistan (Woodcut No. 946, vol. ii.), nearly ten centuries before this time.

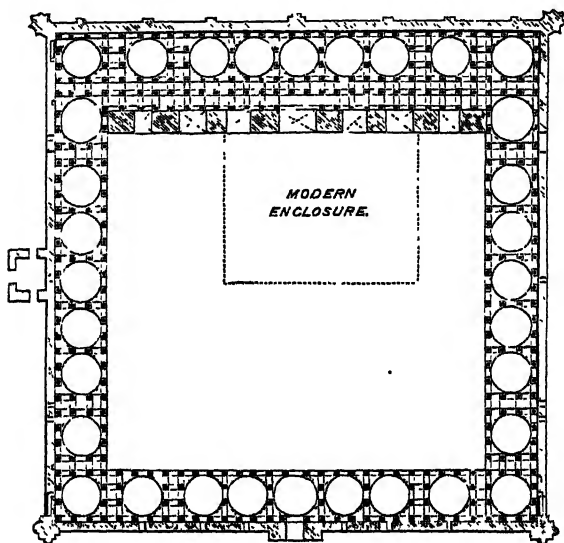
ports,' vol. ii. p. 261.

² Cunningham, 'Archæological Be-

³ I am sorry to differ from Gen. Cunningham on this matter. He has seen the mosque—I have not; but I have

traves, the roofing stones, and the domes, are all of a piece, and so exactly what we find at Abu and Ginar as to leave no doubt that we see before us a part of the courtyard of a Jaina Temple, which probably had been used by the followers of that religion for a couple of centuries at least before it was appropriated by the conquerors. It is only the west side, with its nine domes, that is now standing. The cloisters on the other three sides are in ruins, though their plan can easily be traced even now. What remains, however, is sufficient to show that it must originally have been a singularly elegant specimen of its class. The pillars are taller and more slender than those of the mosque at Delhi, but purer and more elegant in design.

The glory, however, of this mosque, as of that of the Kutub, is the



283. Mosque at Ajmir. (Compiled from a Plan by Gen. Cunningham.) Scale 100 ft. to 1 in.

screen of seven arches with which Altumsh adorned the courtyard (Woodcut No. 284). Its dimensions are very similar to those of its rival. The central arch is 22 ft. 3 in. wide; the two on either side 13 ft. 6 in., and the outer one at each end 10 ft. 4 in. In the centre the screen rises to a height of 56 ft., and on it are the ruins of two small minarets 10½ ft. in diameter, ornamented with alternate circular and angular flutes, as in the lower storey of the Kutub. It is not clear

photographs and drawings of it, and directed Mr. Burgess's attention especially to this point when he visited it, and the result is a conviction on my mind that the pillars now standing are unaltered in arrangement.

Tod, in his 'Annals,' treats it simply as a Jaina temple, without referring to any possible alterations, except additions made by Moslem architects. vol. i. p. 779, see also his plate, which is singularly correct.

whether anything of the same sort existed at Delhi—probably not, as the great minar may have served for that purpose, and their introduction here looks like an afterthought, and the production of an unpractised hand working in an unfamiliar style. Wherever and whenever minars were afterwards introduced, preparations for them



284.

Great Arch in Mosque at Ajmir. (From a Photograph.)

were always made from the foundations, and their lines are always carried down to the ground, in some shape or other, as in true art they ought to be. This solecism, if it may be so called, evidently arose from the architects being Hindus, unfamiliar with the style; and to this also is due the fact that all the arches are constructed on the horizontal principle. There is not a true arch in the place;

but, owing to their having the command of larger stones than were available at Delhi, the arches are not here crippled, as they were there before the late repairs.

It is neither, however, its dimensions nor design that makes this screen one of the most remarkable architectural objects in India, but the mode in which it is decorated. Nothing can exceed the taste with which the Cufic and Togra inscriptions are interwoven with the more purely architectural decorations, or the manner in which they give life and variety to the whole, without ever interfering with the constructive lines of the design. As before remarked, as examples of surface-decoration, these two mosques of Altumsh at Delhi and Ajmir are probably unrivalled. Nothing in Cairo or in Persia is so exquisite in detail, and nothing in Spain or Syria can approach them for beauty of surface-decoration. Besides this, they are unique. Nowhere else would it be possible to find Mahomedan largeness of conception, combined with Hindu delicacy of ornamentation, carried out to the same extent and in the same manner. If to this we add their historical value as the first mosques erected in India, and their ethnographic importance as bringing out the leading characteristics of the two races in so distinct and marked a manner, there are certainly no two buildings in India that better deserve the protecting care of Government; the one has received its fair share of attention; the other has been most shamefully neglected, and latterly most barbarously ill-treated.¹

¹ Owing to the Hindu part being undisturbed, and the Mahomedan part better built and with larger materials, the mosque is not in the same ruinous condition as that at the Kutub was before the late repairs. It is, however, in a filthy and neglected state, and might at a very slight outlay be preserved from further dilapidation, and its beauties very much enhanced. There is, so far as I can judge, no building in India more worthy of the attention of Government than this. The kind of care, however, that is bestowed upon it may be gathered from the following extract from a private letter from a gentleman high in the Government service in India, and one perfectly well informed as to what he was writing about: "Have you ever heard that some of the Hindu pillars of the great mosque at Ajmir were dragged from their places (I pre-

sume they were fallen pillars), and set up as a triumphal arch on the occasion of Lord Mayo's visit? and have you heard that they were so insecurely converted that nobody dared to go under them, and that Lord Mayo and the inspired — of architects went round it?" This is more than confirmed in a public letter by Sir John Strachey, Lieut.-Governor of the North-West Provinces, addressed to Lord Northbrook, on 25th August last. In this he speaks of "an over zealous and strict officer who, not long ago, actually pulled down the sculptured columns of a well-known temple of great antiquity" — the Arhai din ka Jhompra — "with the object of decorating a temporary triumphal arch through which the Viceroy was to pass." He then proceeds to quote what Rousselet says regarding our neglect of such monuments, which is not one whit too severe.

LATER PATHAN STYLE.

After the death of Ala ud-din (A.D. 1316) a change seems to have come over the spirit of the Pathan architects, and all their subsequent buildings, down to the time of Shere Shah, A.D. 1539, exhibit a stern simplicity of design, in marked contrast to the elaborate ornamentation with which they began. It is not clear whether this arose from any puritanical reaction against the quasi-Hinduism of the earlier examples, or from any political causes, the effect of which it is now difficult to trace : but, certain it is, that when that stern old warrior Tugluck Shah, A.D. 1321, founded the New Delhi, which still bears his name—Tugluckabad—all his buildings are characterised by a severe simplicity, in marked contrast with those which his predecessors erected in the capital that overlooks the plain in which his citadel is situated. His tomb, which was finished at least, if not built, by his successor, instead of being situated in a garden, as is usually the case, stands by itself in a strongly-fortified citadel of its own, surrounded by an artificial lake. The sloping walls and almost Egyptian solidity of this mausoleum, combined with the bold and massive towers of the fortifications that surround it, form a model of a warrior's tomb hardly to be rivalled anywhere, and in singular contrast with the elegant and luxuriant garden-tombs of the more settled and peaceful dynasties that succeeded.

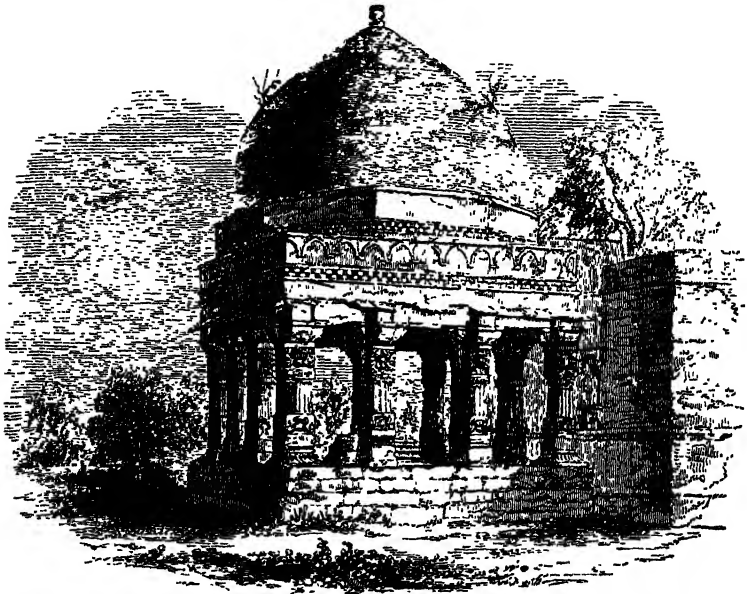
The change, however, of most interest from a historical point of view is, that by the time of Tugluck Shah's reign, the Moslems had worked themselves entirely free from Hindu influence. In his buildings all the arches are true arches ; all the details invented for the place where they are found. His tomb, in fact, would be as appropriate—more so, indeed—if found in the valley of the Nile than on the banks of the Jumna ; and from that time forward Mahomedan architecture in India was a new and complete style in itself, and developed according to the natural and inevitable sequences of true styles in all parts of the world.

It is true, nevertheless, that in their tombs, as well as in their mosques, they frequently, to save themselves trouble, used Hindu materials when they were available, and often with the most picturesque effect. Many of these compound edifices are composed of four pillars only, surmounted by a small dome ; but frequently they adopt with the pillars the Jaina arrangement of twelve pillars, so placed as to support an octagonal framework, easily moulded into a circular basement for a dome. This, as before observed, is the arrangement of the tomb at Mylassa, and the formative idea of all that is beautiful in the plans of Jaina buildings in India.

One example must suffice to explain the effect of these buildings

(Woodcut No. 285). At first sight the dome looks rather heavy for the substructure; but the effect of the whole is so picturesque that it is difficult to find fault with it. If all the materials were original, the design would be open to criticism; but, when a portion is avowedly borrowed, a slight want of balance between the parts may be excused.

There are several examples of tombs of this sort at the Bakaraya Kund in Benares, evidently made up from Jaina materials;¹ and, indeed, wherever the Mahomedans fairly settled themselves on a site previously occupied by the Jains, such combinations are frequent; but no attempt is ever made to assimilate the parts that are Mahomedan with



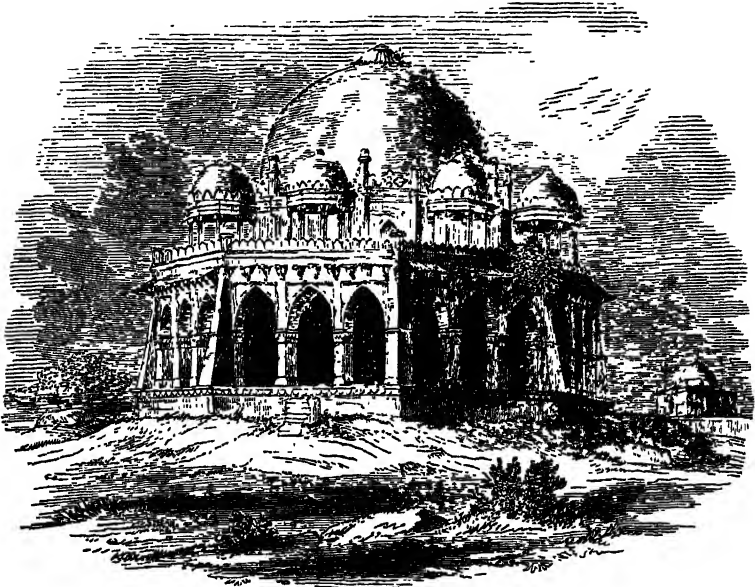
235. Pathan Tomb at Shepree, near Gualior. (From a Sketch by the Author.)

those belonging to the Hindu style which they are employing; they are of the age in which the tomb or mosque was built, and that age, consequently, easily recognisable by any one familiar with the style.

The usual form of a Pathan tomb will be better understood from the following woodcut (No. 236), representing a nameless sepulchre among the hundreds that still strew the plains of Old Delhi. It consists of an octagonal apartment, about 50 ft. in diameter, surrounded by a verandah following the same form, each face being ornamented

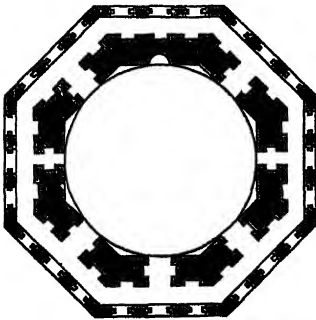
¹Journal of the Asiatic Society of Bengal,' vol. xxxiv. p. 1, *et seq.*, pls. 1-8. It is to me inconceivable that any one looking at these plates, especially the plans, pls. 7 and 8, can see anything in them but the usual tomb of a Mahomedan noble of the 15th century with its accompanying mosque.

by three arches of the stilted pointed form generally adopted by the Pathans, and it is supported by double square columns, which are almost as universal with them as this form of arch.



286. Tomb at Old Delhi. (From a Sketch by the Author.)

It is a form evidently borrowed from the square pier of the Jains, but so altered and so simplified, that it requires some ingenuity to recognise its origin in its new combination.



287. Tomb of Shere Shah at Sasseram.
No scale.

The series of Pathan tombs closes with that of Shere Shah (Woodcut No. 287), the last but one and the most illustrious of his race. It is situated on a square terrace in the middle of a large tank, near Sasseram, in Shahabad, and, from its locality and its design, is now a singularly picturesque object (Woodcut No. 288). Its dimensions too are considerable.¹ Its base is an octagon, 5½ ft. on each side externally. In the interior a

gallery, 10 ft. wide, surrounds the central apartment, which is sur-

¹ These dimensions are taken from the text and a plan of the building in Mont

mounted by a dome 65 ft. in diameter, beneath which stands the tomb of the founder and of some of his favourite companions in arms.

On the exterior, the terrace on which it stands is ornamented by bold octagonal pavilions in the angles, which support appropriately the central dome, and the little bracketed kiosks between them break pleasingly the outline. In the same manner the octagonal kiosks that cluster round the drum of the dome, and the dome itself, relieve the



288.

Tomb of Shere Shah. (From a Photograph.)

monotony of the composition without detracting from its solidity or apparent solemnity. Altogether, as a royal tomb of the second class, there are few that surpass it in India, either for beauty of outline or appropriateness of detail. Originally it was connected with the mainland by a bridge, which fortunately was broken down before the

gomery Martin's edition of Buchanan Hamilton's 'Statistical Account of Shahabad,' vol. i. p. 425. The plan is, how-

ever, so badly drawn that it can hardly be reproduced.

grand trunk road passed near. But for this, it would probably have been utilised before now.

The mosques of the Pathans bore the same aspect as their tombs. The so-called Kala Musjid in the present city of Delhi, and finished, according to an inscription on its walls, in A.D. 1389, is in a style not unlike the tomb (Woodcut No. 286), but more massive, and even less ornamented. This severe simplicity seems to have been the characteristic of the latter part of the 14th century, and may have been a protest of the more puritanical Moslem spirit against the Hindu exuberance which characterised both the 13th and the 15th centuries. A reaction, however, took place, and the late Pathan style or Delhi was hardly less rich, and certainly far more appropriate for the purposes to which it was devoted than the first style, as exhibited in the buildings at the Kutub.

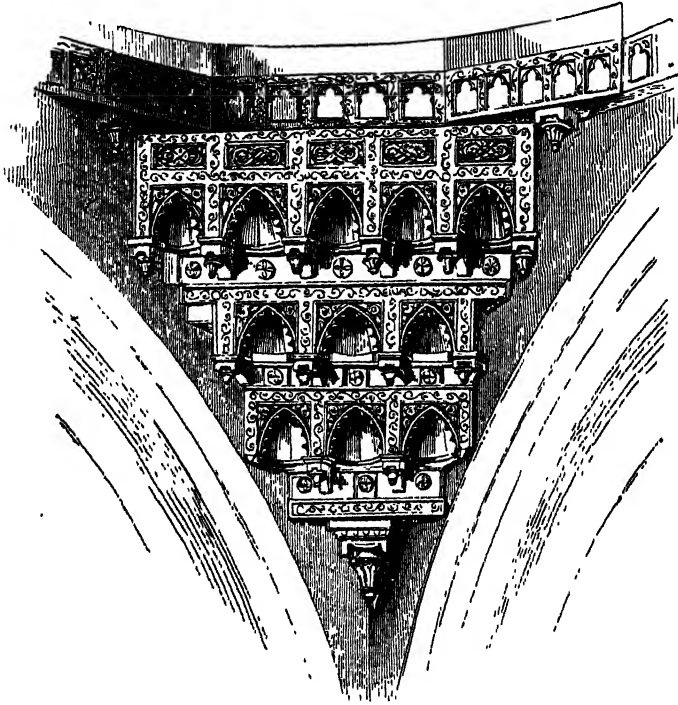
This, however, was principally owing to the exceptional splendour of the reign of Shere Shah, who, however, is so mixed up both in date and in association with the earlier Moguls, that it is difficult to discriminate between them. Though Baber practically conquered India in A.D. 1494, his successor, Humayun, was defeated and driven from the throne by Shere Shah in A.D. 1540, and it was only in A.D. 1554 that the Mogul dynasty was finally and securely established at Delhi. The style consequently of the first half of the 16th century may be considered as the last expiring effort of the Pathans, or the first dawn of that of the great Moguls, and it was well worthy of either.

At this age the façades of these mosques became far more ornamental, and more frequently encrusted with marbles, and always adorned with sculpture of a rich and beautiful character; the angles of the buildings were also relieved by little kiosks, supported by four richly bracketed pillars, but never with minarets, which, so far as I know, were not attached to mosques during the Pathan period. The call to prayer was made from the roof; and, except the first rude attempt at Ajmir, I do not know a single instance of a minaret built for such a purpose, though they were, as we know, universal in Egypt and elsewhere long before this time, and were considered nearly indispensable in the buildings of the Moguls very shortly afterwards. The Pathans seem to have regarded the minar as the Italians viewed the Campanile, more as a symbol of power and of victory than as an adjunct to a house of worship.

The body of the mosque became generally an oblong hall, with a central dome flanked by two others of the same horizontal dimensions, but not so lofty, and separated from it by a broad bold arch, the mouldings and decorations of which formed one of the principal ornaments of the building.

The pendentives were even more remarkable than the arches for elaborateness of detail. Their forms are so various that it is impossible

to classify or describe them ; perhaps the most usual is that represented in Woodcut No. 289, where the angle is filled up with a number of small imitations of arches, bracketing out one beyond the other. It was this form that was afterwards converted into the honeycomb work of the Arabs in Spain.



289. Pendentive from Mosque at Old Delh'. (From a Sketch by the Author.)

If it were not that the buildings of the Pathans are so completely eclipsed by the greater splendour of those of the Mogul dynasty, which succeeded them in their own capitals, their style would have attracted more attention than has hitherto been bestowed upon it ; and its monograph would be as interesting as any that the Indian-Saracenic affords. In its first period the style was characterised by all the richness which Hindu elaboration could bestow ; in the second by a stern simplicity and grandeur much more appropriate, according to our ideas, to the spirit of the people ; and during the latter part of its existence, by a return to the elaborateness of the past ; but at this period every detail was fitted to its place and its purpose. We forget the Hindu except in his delicacy, and we recognise in this last development one of the completed architectural styles of the world.

CHAPTER 1v.

JAUNPORE.

CONTENTS.

Mosques of Jumma Masjid and Lall Durwaza.

CHRONOLOGY.

Khoja Jehan assumes independence at		Mahmūd	A.D. 1441
Jaunpore	A.D. 1397	Hussain Shah	1451
Mubarick, his son	1400	— deposited and seeks refuge at Gaur.	1478
Shems ud din - Ibrahim Shah	1401		

IT was just two centuries after the conquest of India by the Moslems that Khoja Jehan, the Soubahdar or governor of the province in which Jaunpore is situated, assumed independence, and established a dynasty which maintained itself for nearly a century, from A.D. 1397 to about 1478, and though then reconquered by the sovereign of Delhi, still retained a sort of semi-independence till finally incorporated in the Mogul empire by the great Akbar. During this period Jaunpore was adorned by several large mosques, three of which still remain tolerably entire, and a considerable number of tombs, palaces, and other buildings, besides a fort and bridge, all of which are as remarkable specimens of their class of architecture as are to be found anywhere in India.

Although so long after the time when under Ala ud-din and Tugluck Shah the architecture of the capital had assumed something like completeness, it is curious to observe how imperfect the amalgamation was in the provinces at the time when the principal buildings at Jaunpore were erected. The principal parts of the mosques, such as the gateways, the great halls, and the western parts generally, are in a complete arcuate style. Wherever indeed wide openings and large internal spaces were wanted, arches and domes and radiating vaults were employed, and there is little in those parts to distinguish this architecture from that of the capitals. But in the cloisters that surround the courts, and in the galleries in the interior, short square pillars are as generally employed, with bracket capitals, horizontal architraves, and roofs formed of flat slabs, as was invariably the case in Hindu and Jaina temples. Instead of being fused together, as they afterwards became, the arcuate style of the Moslems stands here, though in juxtaposition, in such marked contrast to the trabeate style

of the Hindus, that some authors have been led to suppose that the pillared parts belonged to ancient Jaina or Buddhist monuments, which had been appropriated by the Mahomedans and converted to their purposes.¹ The truth of the matter appears to be, that the greater part of the Mahomedans in the province at the time the mosques were built were Hindus converted to that religion, and who still clung to their native forms when these did not clash with their new faith; and the masons were almost certainly those whose traditions and whose taste inclined them much more to the old trabeate forms than to the newly-introduced arched style.

As we shall presently see at Gaur, on the one hand, the arched style prevailed from the first, because the builders had no other material than brick, and large openings were then impossible without arches. At Ahmedabad, on the other hand, in an essentially Jaina country, and where stone was abundant, the pillared forms were not only as commonly employed, as at Jaunpore, but were used for so long a time, that before the country was absorbed in the Mogul empire, the amalgamation between the trabeate and arcuate forms was complete.

The oldest mosque at Jaunpore is that in the fort, which we learn from an inscription on it, was completed in A.D. 1398. It is not large—barely 100 ft. north and south—and consists of a central block of masonry, with a large archway, of the usual style of the Mahomedan architecture of the period, and five openings between pillars on either hand. The front rows of these pillars are richly sculptured, and were evidently taken from some temple that existed there, or in the neighbourhood, before the Moslem occupation, but they seem to have exhausted the stock, as no other such are found in any of the mosques built subsequently.²

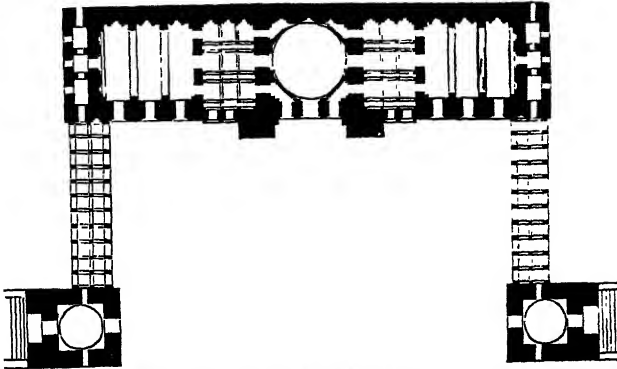
There are three great mosques still standing in the city; of these the grandest is the Jumma Musjid (Woodcuts Nos. 290, 291), or Friday

¹ The first to suggest this was the Baron Hügel, though his knowledge of the subject was so slight that his opinion would not have had much weight. The idea was, however, taken up afterwards and warmly advocated by the late Mr. Horne, B.C.S., and the Rev. Mr. Sherring, in a series of papers in the 'Journal of the Asiatic Society of Bengal,' vol. xxxiv. p. 1, *et seqq.*, and by the latter in his work on 'The sacred city of the Hindus,' p. 283, and elsewhere. They have hitherto failed to adduce a single example of similar pillars existing in any authentic Buddhist or Jaina building

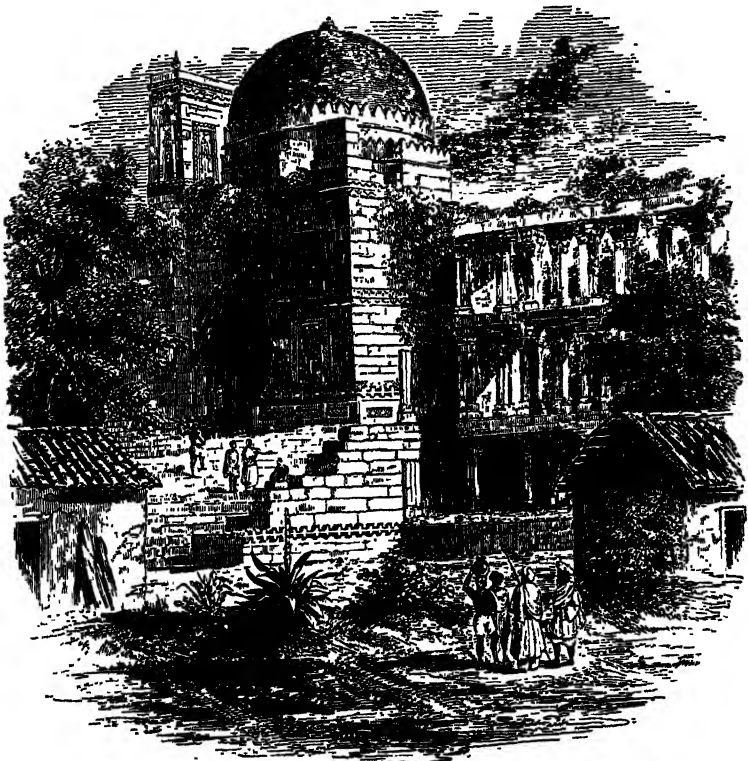
—they mean Jaina, though they say Buddhist—or any historical or other evidence that will bear a moment's examination. There may have been some Jaina or Hindu buildings at Jaunpore of the 13th or 14th centuries that may have been utilised by the Mahomedans, but certainly nine-tenths at least of the pillars in these mosques were made at the time they were required for the places they now occupy.

² A view of this mosque will be found in Kitloe's 'Indian Architecture,' but, unfortunately, no plan or dimensions. That quoted in the text is from memory.

Mosque, which was commenced by Shah Ibrahim, A.D. 1419, but not completed till the reign of Husain, A.D. 1451-1478. It consists of a



290. Plan of Western Half of Courtyard of Jumma Masjid, Jaunpore. (From a Plan by the Author.)
Scale 100 ft. to 1 in.



291. View of lateral Gateway of Jumma Masjid, Jaunpore. (From a Drawing by the Author.)

courtyard 220 ft. by 214 ft., on the western side of which is situated a range of buildings, the central one covered by a dome 40 ft. in dia-

meter, in front of which stands a gate pyramid or *propylon*,¹ of almost Egyptian mass and outline, rising to the height of 86 ft. This gate pyramid by its elevation supplied the place of a minaret, which is a feature as little known at Jaunpore, as it was, at the same age, in the capital city of Delhi. On each side of the dome is a compartment divided into two storeys by a stone floor supported on pillars; and beyond this, on each side, is an apartment 40 ft. by 50 ft.,



292. Lall Durwaza Mosque, Jaunpore. (From a Drawing by the Author.)

covered by a bold pointed vault with ribs, so constructed that its upper surface forms the external roof of the building, which in Gothic vaults is scarcely ever the case. The three sides of the courtyard were surrounded by double colonnades, two storeys in height internally, but with three on the exterior, the floor of the courtyard being raised to the height of the lower storey. On each face was a handsome gateway; one of which is represented in Woodcut No. 291, which gives

¹ A view of it, but not a good one, is given in Daniell's plates. It is partially seen in Woodcut No. 291.

a fair idea of the style: the greater part of the eastern side of the court has been taken down and removed by the English to repair station-roads and bridges, for which in their estimation these pillars are admirably adapted.

The smallest of the mosques in the city is the Lall Durwaza or Red Gate. It is in the same style as the others; and its propylon—represented in Woodcut No. 292—displays not only the bold massiveness with which these mosques were erected, but shows also that strange admixture of Hindu and Mahomedan architecture which pervaded the style during the whole period of its continuance.

Of all the mosques remaining at Jaunpore, the Atala Musjid is the most ornate and the most beautiful. The colonnades surrounding its court are four aisles in depth; the outer columns, as well as those next the court, being double square pillars. The three intermediate rows are single square columns, supporting a flat roof of slabs, arranged as in Jaina temples. Externally, too, it is two storeys in height, the lower storey being occupied by a series of cells opening outwardly. All this is so like a Hindu arrangement that one might almost at first sight be tempted, like Baron Hügel, to fancy it was originally a Buddhist monastery. He failed to remark, however, that both here and in the Jumma Musjid the cells open outwardly, and are below the level of the courtyard of the mosque—an arrangement common enough in Mahomedan, but never found in Buddhist, buildings. Its gateways, however, which are the principal ornaments of the outer court, are purely Saracenic, and the western face is adorned by three propylons similar to that represented in the last woodcut, but richer and more beautiful, while its interior domes and roofs are superior to any other specimen of Mahomedan art I am acquainted with of so early an age. They are, too, perhaps, more striking here, because, though in juxtaposition with the quasi-Hinduism of the court, they exhibit the arched style of the Saracenic architects in as great a degree of completeness as it exhibited at any subsequent period.

The other buildings hardly require particular mention, though, as transition specimens between the two styles, these Jaunpore examples are well worthy of illustration, and in themselves possess a simplicity and grandeur not often met with in this style. An appearance of strength, moreover, is imparted to them by their sloping walls, which is foreign to our general conception of Saracenic art, though at Tuglucabad and elsewhere it is carried even further than at Jaunpore. Among the Pathans of India the expression of strength is as characteristic of the style as massiveness is of that of the Normans in England. In India it is found conjoined with a degree of refinement seldom met with elsewhere, and totally free from the coarseness which in other countries usually besets vigour and boldness of design.

The peculiarities of this style are by no means confined to the capital; they prevail at Gazeepore, and as far north as Canouge, while at Benares the examples are frequent. In the suburbs of that city, at a place called the Bakaraya Kund,¹ there is a group of tombs, as mentioned above, and other buildings belonging to the Moslems, which are singularly pleasing specimens of the Jaunpore style, and certainly belong to the same age as those just described.

The kingdom of Jaunpore is also rich in little tombs and shrines in which the Moslems have used up Hindu and Jaina pillars, merely rearranging them after their own fashion. These, of course, will not bear criticism as architectural designs, but there is always something so indescribably picturesque about them as fairly to extort admiration. The principal example of this compound style is a mosque at Canouge, known popularly as "Sita ka Rasni," "Sita's kitchen." It is a Jaina temple, rearranged as a mosque, in the manner described at pp. 263-4. It measures externally 133 ft. by 120 ft. The mosque itself has four rows of fifteen columns each, and three domes. The cloisters surrounding the court are only two rows in depth, and had originally sixty-eight pillars, smaller than those of the mosque. Externally it has no great beauty, but its pillared court is very picturesque and pleasing. According to an inscription over its principal gateway, its conversion was effected by Ibrahim Shah, of Jaunpore, A.D. 1406.²

At a later age, and even after it had lost its independence, several important buildings were erected in the capital and in other towns of the kingdom in the style of the day; but none of these, so far as is now known, are of sufficient importance to require notice in such a work as the present.

¹ If the buildings of the Bakaraya Kund had been found within twenty miles of Ahmedabad, where there are dozens exactly like them, they would hardly have deserved a passing remark. Any one familiar with the style would have assigned them a date—A. D. 1450, or thereabouts—and would hardly have troubled himself to inquire who built

them, they are so like all others of the same age.

² General Cunningham's 'Reports' for 1862-63, vol. i. p. 287. From this I learn that the pillars surrounding the court on three sides have been removed since I saw them in 1836—this time, however, not by the English.

CHAPTER V.

GUJERAT.

Jumma Musjid and other Mosques at Ahmedabad—Tombs and Mosques at Sirkej and Butwa—Buildings in the Provinces.

CHRONOLOGY.

Muzaffar Shah, a Rajput, appointed Viceroy A.D. 1391	Mahmúd Shah Begurra A.D. 1459	1459
Ahmed Shah, his grandson, founds Ahmedabad	Muzaffar Shah II.	1511
Mohammed Shah the Merciful . . .	Bahadur Shah murdered by Portuguese	1526
Kutub Shah ; war with Rana Khumbo.	Muzaffar Shah III.	1561
	Gujerat becomes a province of Akbar's kingdom	1583

OF the various forms which the Saracenic architecture assumed in India, that of Ahmedabad may probably be considered as the most elegant, as it certainly is the most characteristic of all. No other form is so essentially Indian, and no one tells its tale with the same unmistakable distinctness.

As mentioned above, the Mahomedans, in the first century of the Hejira, made a brilliant attempt to conquer Scinde and Gujerat, and apparently succeeded ; but the country was so populous, and its civilization so great, that the invaders were absorbed, and soon disappeared from the scene.

Mahmúd of Ghazni next overran the province, but left no permanent mark ; and even after the fall of Delhi (A.D. 1196) Gujerat maintained the struggle for independence for nearly two centuries longer, till Feroze Tugluck, in A.D. 1391, appointed Muzaffar, a converted Rajput, of the Tak clan, to be his viceroy. This, however, was only on the eve of the troubles caused by the invasion of Tamerlane, and, *mutato domino*, Gujerat remained as independent as before.

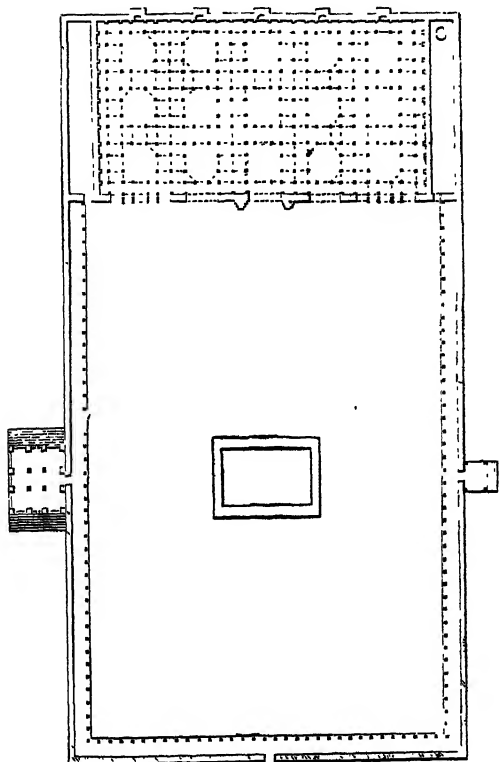
The next two centuries—during which the Ahmed Shahi dynasty occupied the throne—were spent in continual wars and struggles with their refractory vassals and the neighbouring chiefs. On the whole, however, their power may be said to have been gradually on the increase till the death of Bahadur, A.D. 1536, but they never wholly subdued the rebellious spirit of their subjects, and certainly never converted the bulk of them to their faith. As a consequence of this, the principal buildings with which this chapter is concerned are

to be found in the capital and its immediate proximity. Beyond that the Hindus followed their old faith and built temples as before; though in such large cities as Cambay or Baroach the Mahomedans, of course, possessed places of worship, some of them of considerable importance, and generally made up from pillars borrowed from Hindu buildings.

In Ahmedabad itself, however, the Hindu influence continued to be felt throughout. Even the mosques are Hindu, or rather Jaina, in every detail; only here and there an arch is inserted, not because it was wanted constructively, but because it was a symbol of the faith, while in their tombs and palaces even this is generally wanting. The truth of the matter is, the Mahomedans had forced themselves upon the most civilized and most essentially building race at that time in India, and the Chalukyas conquered their conquerors, and forced them to adopt forms and ornaments which were superior to any the invaders knew or could have introduced. The result is a style which combines all the elegance and finish of Jaina or Chalukyan art, with a certain largeness of conception which the Hindu never quite attained, but which is characteristic of the people who at this time were subjecting all India to their sway.

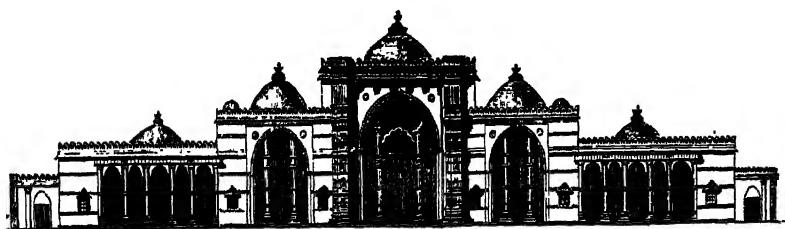
The first seat of the Mahomedan power was Anhilwarra, the old capital of the Rajputs, and which, at the time it fell into their power, must have been one of the most splendid cities of the East. Little now remains of all its magnificence, if we may trust what is said by recent travellers who have visited its deserted palaces. Ahmed, the second king, removed the seat of power to a town called Kurnawutti, afterwards known as Ahmedabad, from the name of its second founder, and which, with characteristic activity, he set about adorning with splendid edifices. Of these the principal was the Jumma Musjid, which, though not remarkable for its size, is one of the most beautiful mosques in the East. Its arrangement will be understood from the next plan (Woodcut No. 293). Its dimensions are 382 ft. by 258 ft. over all externally; the mosque itself being 210 ft. by 95 ft., covering consequently about 20,000 sq. ft. Within the mosque itself are 260 pillars, supporting fifteen domes arranged symmetrically, the centre three alone being somewhat larger and considerably higher than the others. If the plan is compared with that of the temple at Sadri (Woodcut No. 133), which was being erected at the same time by Khumbo Rana within 160 miles of Ahmedabad, it will afford a fair means of comparison between the Jaina and Mahomedan arrangements of that day. The form of the pillars and the details generally are practically the same in both buildings, the Hindu being somewhat richer and more elaborate. In plan, the mosque looks monotonous as compared with the temple; but this is redeemed, to some extent, by the different heights of the domes, as shown in the elevation (Wood-

out No. 294), and by the elevation of each division being studiously varied. My own feeling is in favour of the poetry of the temple, but there is a sobriety about the plan of the mosque which, after all, may be in better taste. Both plans, it need hardly be remarked, are in-



293

Plan of Jumma Masjid, Ahmedabad. Scale 100 ft. to 1 in.



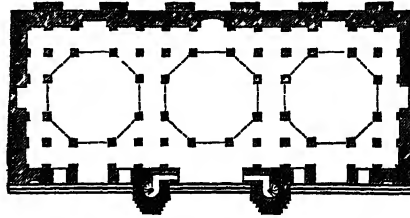
294.

Elevation of the Jumma Masjid. Scale 50 ft. to 1 in.

finitely superior to the monotony of the southern halls of 1000 pillars. The latter are remarkable for their size and the amount of labour bestowed upon them, but it requires more than this to constitute good architecture.

The general character of the elevation will be understood from the woodcut No. 294, but unfortunately its minarets are gone. When Forbes¹ drew it, they were still standing, and were celebrated in Eastern story as the shaking minarets of Ahmedabad; an earthquake in A.D. 1818 shook them too much, but there are several others still standing in the city from which their form can easily be restored.

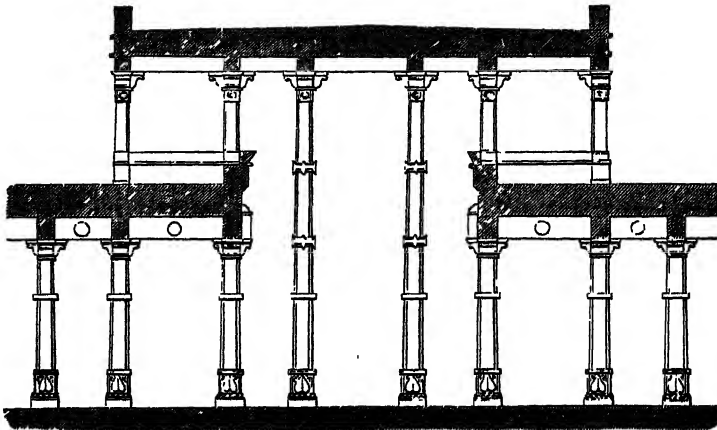
The plan and lateral extension of the Jumma Musjid are exceptional. The usual form taken by the mosques at Ahmedabad was that of the Queen's Mosque at Mirzapore, and consists of three domes standing on twelve pillars each, with the central part so raised as to admit light to the interior. The mode in which this was effected will be understood from the annexed diagram (Woodcut No. 297). The pillars which support



295. Plan of the Queen's Mosque, Mirzapore.
Scale 50 ft. to 1 in.



Elevation of the Queen's Mosque, Mirzapore.
Scale 50 ft. to 1 in.



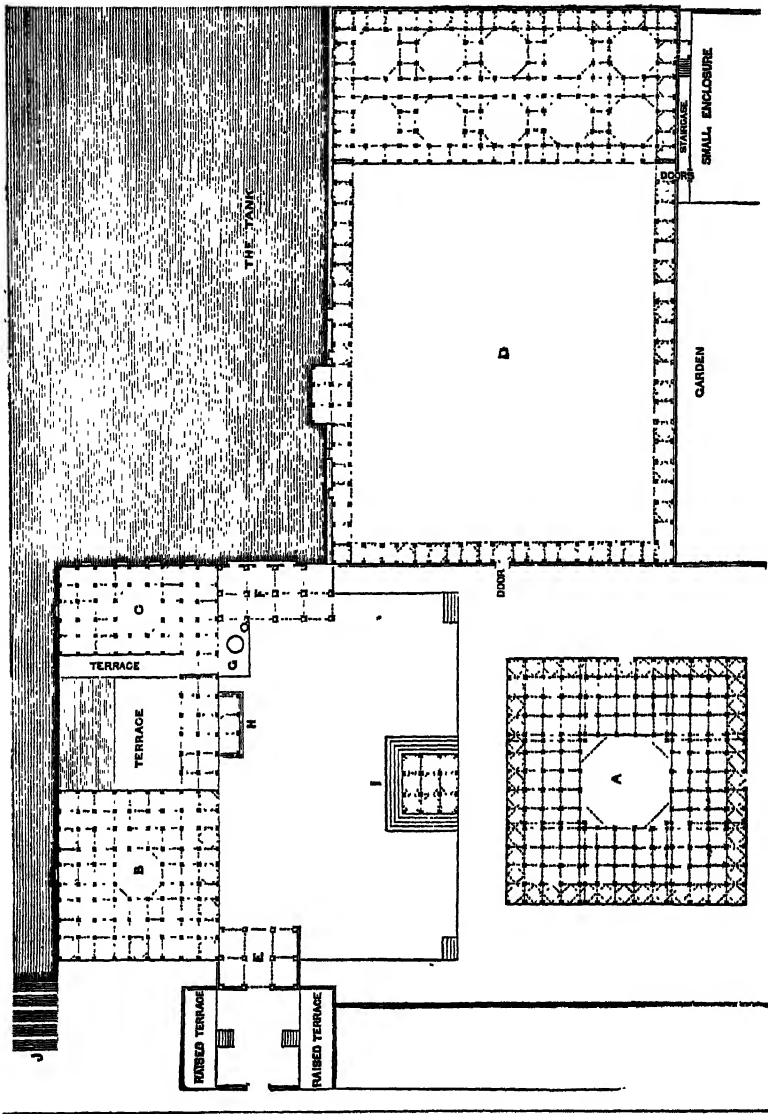
297. Section of Diagram explanatory of the Mosques at Ahmedabad.

the central domes are twice as high as those of the side domes, and two rows of dwarf columns stand on the roof to make up the height.

¹ See plate in Forbes' 'Oriental Memoirs,' vol iii ch. xxx.

In front of these internally is a solid balustrade, which is generally most richly ornamented by carving. Thus arranged, it will be perceived that the necessary amount of light is introduced, as in the drum of a Byzantine dome, but in a more artistic manner. The sun's rays can never fall on the floor, or even so low as the head of any one standing there. The light is reflected from the external roof into the dome, and perfect ventilation is obtained, with the most pleasing effect of illumination without glare. In order further to guard against the last dreaded contingency, in most of these mosques a screen of perforated stonework was introduced between the outer dwarf columns. These screens were frequently of the most exquisite beauty, and in consequence have very generally been removed.

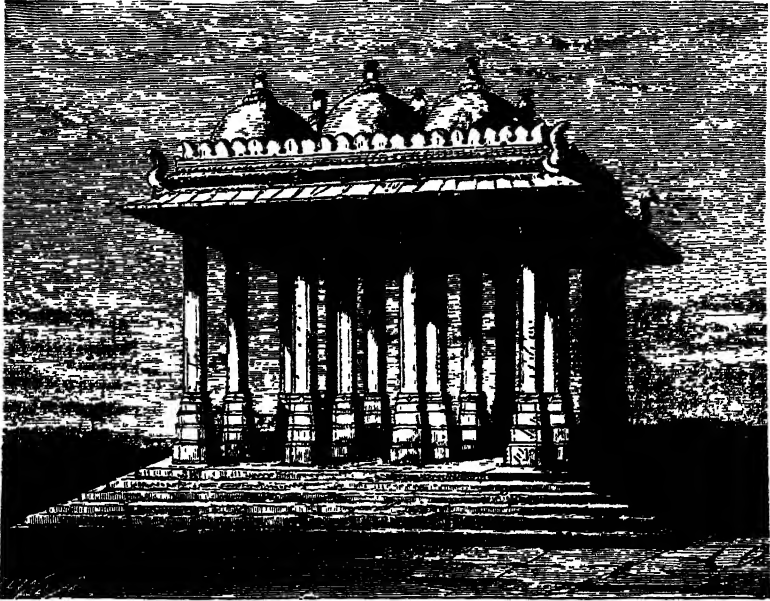
There are three or four mosques at Ahmedabad, built on the same pattern as that last described, but as the style progressed it became more and more Indian. The arches in front were frequently omitted, and only a screen of columns appeared, supported by two minarets, one at each angle. This system was carried to its greatest extent at Sirkej, about five miles from the city. Mohammed Shah, in A.D. 1445, commenced erecting a tomb (A on Woodcut No. 298) here, in honour of Ahmed Gunj Buksh, the friend and adviser of his father. The style of these buildings may be judged of from the woodcut (No. 299, page 532), representing the pavilion of sixteen pillars in front of this tomb (I in Woodcut No. 298). They are of the usual simple outline of the style—a tall, square base; the shafts square, and with no ornament except a countersinking on the angles, and crowned with a moderately projecting bracket-capital. The building is roofed with nine small domes, insignificant in themselves, but both internally and externally forming as pleasing a mode of roofing as ever was applied to such a small detached building of this class. The mosque (D) was completed in A.D. 1451, and Mahmúd Begurra added afterwards a tomb for himself (B) and one for his wife Rajbaie (C). With their accompanying palaces and tombs these make up one of the most important groups in the neighbourhood. The whole are constructed without a single arch; all the pillars have the usual bracket capitals of the Hindus, and all the domes are on the horizontal principle. In the large tomb an attempt has been made to get a larger dome than the usual octagonal arrangement would admit of, but not quite successfully. The octagon does not accord with the substructure, and either wider spaces ought to have been introduced or a polygon of a greater number of sides employed. The mosque is the perfection of elegant simplicity, and is an improvement on the plan of the Jumma Musjid. There are five domes in a line, as there, but they are placed nearer to one another, and though of greater diameter the width of the whole is less, and they are only two ranges in depth. Except the



REFERENCES.

- A. Tomb of Gungj Buk-h.
- B. Tomb of Mahmud Begurra and his Sons
- C. Tomb of Beebee Rajwal, his Queen.
- D. The Mosque.
- E. Covered Gateway.
- F. Covered Hall overlooking the Tank.
- G. Well and Fountain.
- H. Portico leading to Terrace and Steps down to the Tank.
- I. Pavilion.
- J. Portions of the Steps surrounding the Tank.

298. Plan of Tombs and Mosque at Sirkef. (From a Sketch by T. C. Hope, Esq.) Scale 100 ft. to 1 in.

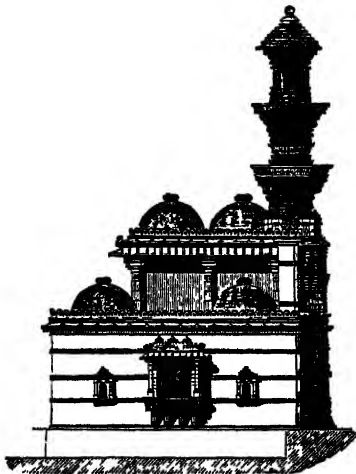


299.

Pavilion in front of Tomb at Sirkej.

Mootee Musjid at Agra, to be described hereafter, there is no mosque in India more remarkable for simple elegance than this.

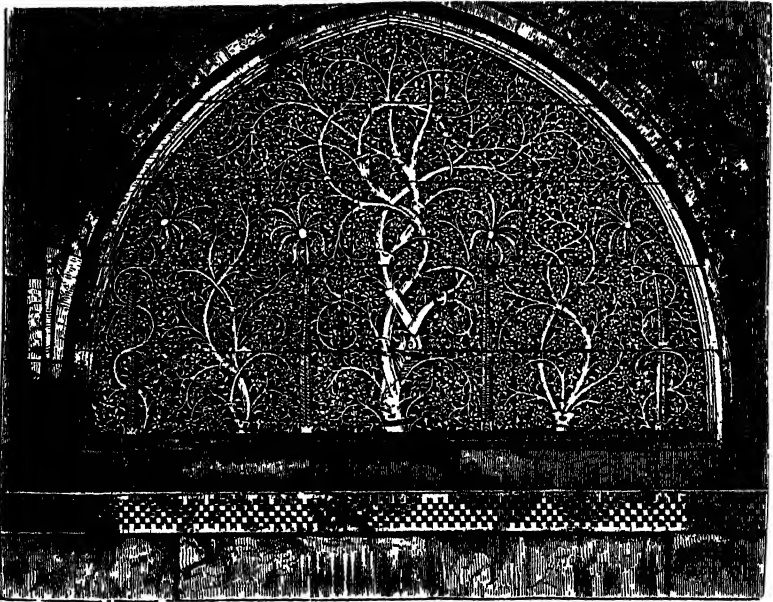
Besides these larger mosques there are several smaller ones of great beauty, of which two—those of Mooháfiz Khan and the Rani Sipri—are pre-eminent. The elevation of the first is by no means happy, but its details are exquisite, and it retains its minarets, which is too seldom the case. As will be seen from the woodcut, as well as from those of the Jumma and Queen's Mosques (Nos. 294, 296), the lower part of the minarets is of pure Hindu architecture; all the bases at Ahmedabad are neither more nor less than the perpendicular parts of the basement of Hindu or Jaina temples elongated. Every form and every detail may be found



300. Mosque at Mooháfiz Khan.
Scale 25 ft. to 1 in.

at Chandravati or Abu, except in one particular—on the angles of all Hindu temples are niches containing images. This the Moslem

could not tolerate, so he filled them with tracery. We can follow the progress of the development of this form, from the first rude attempt in the Jumma Masjid, through all its stages to the exquisite patterns of the Queen's Mosque at Mirzapore. After a century's experience they produced forms which as architectural ornaments will, in their own class, stand comparison with any employed in any age or in any part of the world; and in doing this they invented a class of window-tracery in which they were also unrivalled. The specimen below (Woodcut No. 301), from a window in a desecrated mosque in the palace (the Bhudder) will convey an idea of its elaborateness



Window in Bhudder at Ahmedabad. (From a Photograph by Colonel Biggs.)

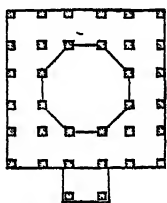
and grace. It would be difficult to excel the skill with which the vegetable forms are conventionalised just to the extent required for the purpose. The equal spacing also of the subject by the three ordinary trees and four palms, takes it out of the category of direct imitation of nature, and renders it sufficiently structural for its situation; but perhaps the greatest skill is shown in the even manner in which the pattern is spread over the whole surface. There are some exquisite specimens of tracery in precious marbles at Agra and Delhi, but none quite equal to this.

Above the roof of the mosques the minarets are always round towers slightly tapering, as in the mosque of Mooháfiz Khan (Woodcut No. 300), relieved by galleries displaying great richness in the

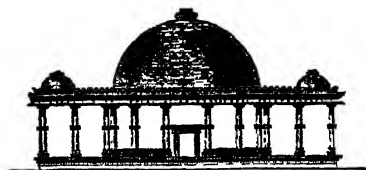
brackets which support them as well as in the balustrades which protect them. The tower always terminates in a conical top relieved by various disks. They are, so far as I know, the only minarets belonging to mosques which surpass those of Cairo in beauty of outline or richness of detail, excepting those of the Rani Sipri mosque, which are still more beautiful. Indeed, that mosque is the most exquisite gem at Ahmedabad, both in plan and detail. It is without arches, and every part is such as only a Hindu queen could order, and only Hindu artists could carve.¹

TOMBS.

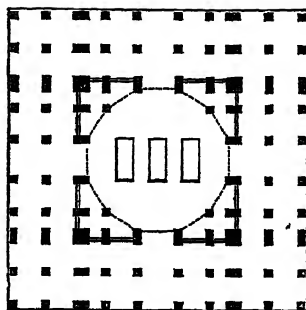
Knowing the style, it would not be difficult to predicate the form of the tombs. The simplest would be that of Abu Touráb; an octa-



302. Tomb of Meer Abu Touráb. Scale 50 ft. to 1 in.



gonal dome supported on twelve pillars, and this extended on every side, but always remaining a square, and the entrances being in the centre of the faces. The difference between this and the Jaina arrangement is that the latter is diagonal (Woodcut No. 119), while these are square. The superiority of the Hindu mode is apparent at a glance. Not, it is true, in so small an arrangement as that last quoted, but in the tombs at Sirkej (Woodcut No. 298), the effect is so monotonous as almost to become unpleasing. With the Jains this never is the case, however numerous the pillars may be.



303. Plan and Elevation of Tomb of Syad Osmán. Scale 50 ft. to 1 in.

Besides the monotony of the square plan, it was felt at Sirkej—as already pointed out—that the octagonal dome fitted awkwardly on to its supports. This was remedied, to a great extent, in the tomb of Syad Osmán, built in A.D. 460 by Mahmúd Begurra. In this instance

¹ As it is impossible by a woodcut to convey an impression of the beauty of these mosques, the reader is referred to the photographs of 'Architecture of Ahmedabad,' &c.

the base of the dome is a dodecagon, and a very considerable amount of variety is obtained by grouping the pillars in twos and fours, and by the different spacing. In elevation the dome looks heavy for the substructure, but not so in perspective; and when the screens were added to inclose the central square, it was altogether the most successful sepulchral design carried out in the pillared style at Ahmedabad.

Towards the end of their career, the architects of Ahmedabad evinced a strong tendency to revert to the arched forms generally used by their brethren in other countries. Mahmūd Begurra built himself a tomb near Kaira, which is wholly in the arched style, and remains one of the most splendid sepulchres in India.¹ He also erected at Butwa, near Ahmedabad, a tomb over the grave of a saint, which is in every respect in the same style. So little, however, were the builders accustomed to arched forms, that, though the plan is judiciously disposed by placing smaller arches outside the larger, so as to abut them, still all those of the outer range have fallen down, and the whole is very much crippled, while the tomb without arches, that stands within a few yards of it, remains entire. The scale of the two, however (Plan No. 305), reveals the secret of the preference accorded to the arch as a constructive expedient. The larger piers, the wider spacing, the whole dimensions, were on a grander scale than could be attained with beams only, as the Hindus used them. As the Greeks and Romans employed these features, any dimensions that were feasible with arches could be attained by pillars; but the Hindus worked to a smaller modulus, and do not seem to have known how to increase it. It must, however, be remarked that they generally used pillars only in courts, where there was nothing to compare them with but the spectator's own height; and there the forms employed by them were large enough. It was only when the Moslems came to use them externally, and in conjunction with arches and other larger features, that their diminutive scale became apparent.

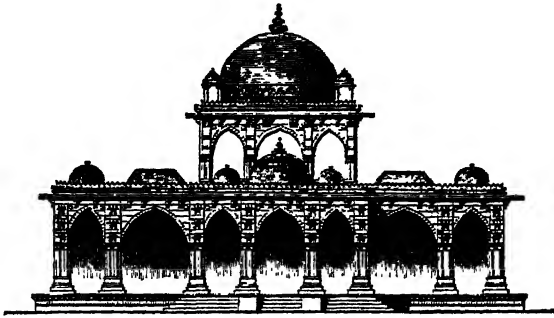
It is perhaps the evidence of a declining age to find size becoming the principal aim. But it is certainly one great and important ingredient in architectural design, and so thought the later architects of Ahmedabad. In their later mosques and buildings they attained greater dimensions, but it was at the expense of all that renders their earlier style so beautiful and so interesting.²

¹ Described further on, p. 538, Woodcuts Nos. 306 and 307.

² I understand from Mr. Burgess that during his recent visit to Ahmedabad, he copied a number of inscriptions from the mosques there which prove that some

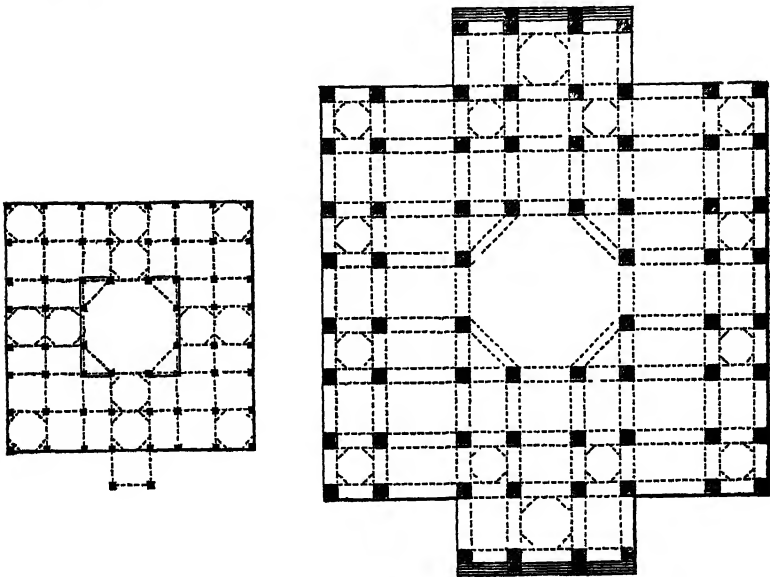
of the names given to the buildings are erroneous. When these are published new names and dates must in some instances be given to several of the buildings, but the alterations, as I understand it, are not very important.

Besides the buildings of the classes above enumerated, there are several smaller objects of art at Ahmedabad which are of extraordinary beauty. Among these are several bowlees, or deep wells, with broad flights of steps leading down to them, and ornamented with pillars and galleries to as great an extent as some of the largest buildings above



304.

Tomb of Kutub-ul-Alum, Butwa. Scale 50 ft. to 1 in.



305.

Plans of Tombs of Kutub-ul-Alum and his Son, Butwa. Scale about 50 ft. to 1 in.

ground. It requires a personal experience of the grateful coolness of a subterranean apartment in a hot climate to appreciate such a class of buildings, and in the rainy West we hardly know how valuable water may become.

Another object of architectural beauty is found in the inflow and outflow sluices of the great tanks which abound everywhere around

the city. Nowhere did the inhabitants of Ahmedabad show how essentially they were an architectural people, as in these utilitarian works. It was a necessity of their nature that every object should be made ornamental, and their success was as great in these as in their mosques or palaces.

BUILDINGS IN THE PROVINCES.

In addition to the numerous edifices that adorn the capital, there are, as hinted above, several in the provincial capitals that are well worthy of notice. Among these the Jumma Musjid at Cambay is perhaps the most splendid. It was erected in A.D. 1325, in the time of Mohammed Shah Gori, and is only inferior to that of the capital in size. It measures over all 200 ft. by 210 ft., and its internal court 120 ft. by 135 ft. Except being somewhat smaller in scale, its plan and arrangements are almost identical with those of the Altumsh Mosque (Woodcut No. 283) at Ajmir: but, when it is looked into, it would be difficult to conceive two buildings more essentially different than these two are. The screen of arches at Cambay, only three in number, are plain even to baldness, and low, in order to fit the dimensions of the Jaina pillars of the interior. These latter are all borrowed from desecrated temples, and in this instance certainly rearranged without much attention to congruity or architectural effect. Still the effect is picturesque, and the parts being employed for the purposes for which they were designed, there is no offensive incongruity anywhere.

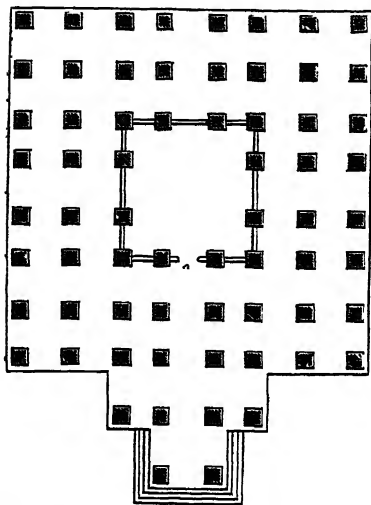
One of the most remarkable features in this mosque is the tomb, which its founder, Imrar ben Ahmed Kajerani erected for himself. It is wholly composed of Hindu remains, and is two storeys in height, and was crowned with a dome 28 ft. in diameter. The parts, however—borrowed, apparently, from different buildings—were so badly fitted together that, after standing some three centuries, it fell in, and has since remained a ruin, singularly picturesque in form and exquisite in detail, but a monument of the folly of employing building materials for any purpose but that for which they were designed.¹

There is another mosque at Baroach, not unlike this one in design but smaller, being only 135 ft. over all north and south, and it has—now, at least—no courtyard; but some of its details, borrowed from Hindu temples, are very beautiful.

There are also two very beautiful mosques at Dolka, a city twenty-two miles south-west from Ahmedabad, almost identical in size and

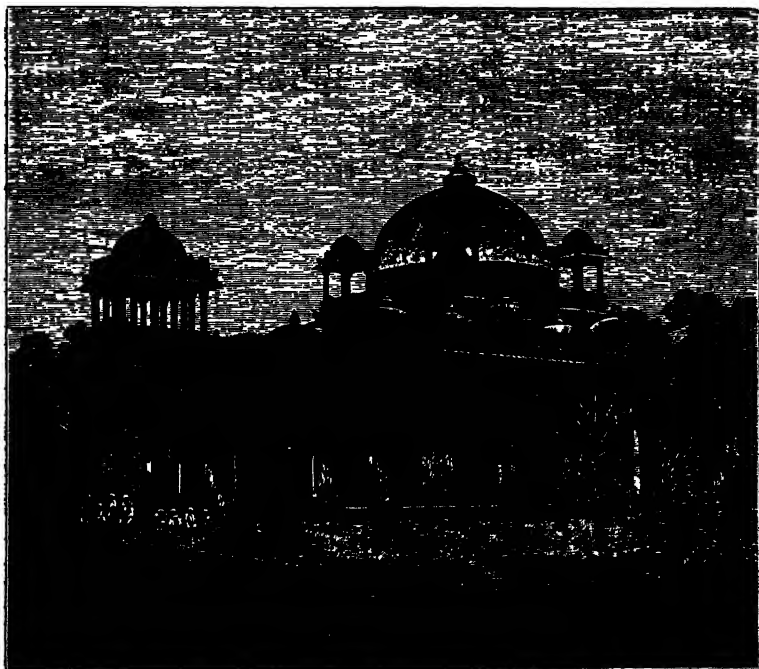
¹ All the particulars above quoted *Cities of Goojerat.* By T. C. Hope, B.C.S. Illustrated by photographs, a work published in Bombay in 1868, plans, and with descriptive text. entitled, 'Surat, Baroach, and other old

plan, being each of them squares of about 150 ft., and the mosque-front covered with five domes and the screen-wall with three arches each.¹



306. Plan of Tomb of Mahmud Begurra, near Kaira. Scale 50 ft. to 1 in.

The most beautiful, however, of these provincial examples is the tomb at Mahmudabad, of its class one of the most beautiful in India (Woodcut No. 306). It was erected by the same Mahmud Begurra, A.D. 1484, who erected the tomb of Kutub-ul-Alm at Butwa, described above (Woodcut No. 304), and is said to have been designed by the same architect. This is, however, a far more successful example, and though small¹—it is only 94 ft square, exclusive of the porch—there is a sim-



307. Tomb of Mahmud Begurra, near Kaira. (From a Photograph.)

¹ Plans of these are in Mr. Hope's work.

plicity about its plan, a solidity and balance of parts in the design, which is not always found in these tombs, and has rarely, if ever, been surpassed in any tomb in India. The details, too, are all elegant and appropriate, so that it only wants somewhat increased dimensions to rank among the very first of its class. Its constructive arrangements, too, are so perfect that no alterations in them would be required, if the scale had been very much increased.

The tomb itself is surrounded by a screen of perforated stonework, of the very finest tracery, and with its double verandah aids in giving the sepulchral chamber that seclusion and repose so indispensable in a mausoleum.¹

¹ There is a very good view of the East'; but the plan and details here tomb in Mr. Grindlay's 'Views of the given are from Mr. Hope's work, sup. cit.

CHAPTER VI.

MALWA.

CONTENTS.

The Great Mosque at Mandu.

CHRONOLOGY.

Sultan Dilawar Ghorî	A.D. 1401	Sultan Ghias u'd-dîn	A.D. 1469
Sultan Hoshang Ghorî	1405	Sultan Mahmûd II.	1512
Ghazni Khan	1432	Malwa incorporated with Gujerat	1534
Mahmûd Khan, cotemp. Rana Khumbo of Chittore	1435	— annexed by Akbar	1568

THE Ghorî dynasty of Mandu attained independence about the same time as the Sharkis of Jaunpore—Sultan Dilawar, who governed the province from A.D. 1387, having assumed the title of Shah in A.D. 1401. It is, however, to his successor Hoshang, that Mandu owes its greatness and all the finest of its buildings. The state continued to prosper as one of the independent Moslem principalities till A.D. 1534, when it was incorporated with Gujerat, and was finally annexed to Akbar's dominion in A.D. 1568.

The original capital of the state was Dhar, an old Hindu city, twenty miles northward of Mandu, to which the seat of government was transferred after it became independent. Though an old and venerated city of the Hindus, Dhar contains no evidence of its former greatness, except two mosques erected wholly of Jaina remains. The principal of these, the Jumma Musjid, has a courtyard measuring 102 ft. north and south, by 131 ft. in the other direction. The mosque itself is 119 ft. by 40 ft. 6 in., and its roof is supported by sixty-four pillars of Jaina architecture, 12 ft. 6 in. in height, and all of them more or less richly carved, and the three domes that adorn it are also of purely Hindu form. The court is surrounded by an arcade containing forty-four columns, 10 ft. in height, but equally rich in carving. There is here no screen of arches, as at the Kutub or at Ajmir. Internally nothing is visible but Hindu pillars, and, except for their disposition and the prayer-niches that adorn the western wall, it might be taken for a Hindu building. In this instance, however, there seems no doubt that there is nothing *in situ*. The pillars have been brought from desecrated temples in the town, and

arranged here by the Mahomedans as we now find them, probably before the transference of the capital to Mandu.

The other mosque is similar to this one, and only slightly smaller. It has long, however, ceased to be used as a place of prayer, and is sadly out of repair. It is called the *Lât Musjid*, from an iron pillar now lying half-buried in front of its gateway. This is generally supposed to have been a pillar of victory, like that at the Kutub; but this can hardly be the case. If it were intended for an ornamental purpose, it would have been either round or octagonal, and had some ornamental form. As it is, it is only a square bar of iron, some 20 ft. or 25 ft. in height, and 9 in. section, without any ornamental form whatever. My impression is, that it was used for some useful constructive purpose, like those which supported the false roof in the Pagoda at Kanaruc (*ante*, page 428). There are some holes through it, which tend further to make this view of its origin probable. But, be this as it may, it is another curious proof of the employment of large masses of wrought-iron by the Hindus at a time when they were supposed to be incapable of any such mechanical exertion. Its date is probably that of the pillars of the mosques where it is found, and from their style they probably belong to the 10th or 11th centuries.

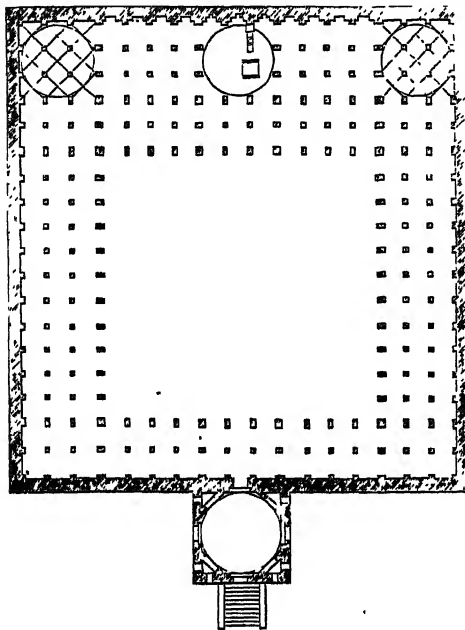
The site on which the city of Mandu is placed is one of the noblest occupied by any capital in India. It is an extensive plateau, detached from the mainland of Malwa by a deep ravine about 300 to 400 yards across, where narrowest, and nowhere less than 200 ft. in depth. This is crossed by a noble causeway, defended by three gateways, and flanked by tombs on either hand. The plateau is surrounded by walls erected on the brink of the cliff—it is said 28 miles in extent. This, however, conveys a very erroneous idea of the size of the place, unless qualified by the information that the walls follow the sinuosities of the ravines wherever they occur, and many of these cut into the hill a mile or two, and are only half a mile across. The plateau may be four or five miles east and west, and three miles north and south, most pleasingly diversified in surface, abounding in water, and fertile in the highest degree, as is too plainly evidenced by the rank vegetation, which is tearing the buildings of the city to pieces or obscuring them so that they can hardly be seen.

The finest building in the city is the *Jumma Musjid*, commenced and nearly completed by Hoshang, the second king, who reigned from A.D. 1405 to A.D. 1432, which, though not very large, is so simple and grand in outline and details, that it ranks high among the monuments of its class. Its dimensions are externally 290 ft. by 275 ft., exclusive of the porch.

Internally, the courtyard is almost an exact square of 162 ft., and

would be quite so, were it not that two of the piers on the east and west faces are doubled. In other respects the four sides of the court are exactly similar, each being ornamented by eleven great arches of precisely the same dimensions and height, supported by piers or pillars, each of one single block of red sandstone. The only variety attempted is, that the east side has two arcades in depth, the north and south three: while the west side, or that facing Mecca, has five, besides being ornamented by three great domes, each 42 ft. in diameter.

As will be seen on the plan (Woodcut No. 308), these large domes are supported each by twelve pillars. The pillars are all equally spaced, the architect



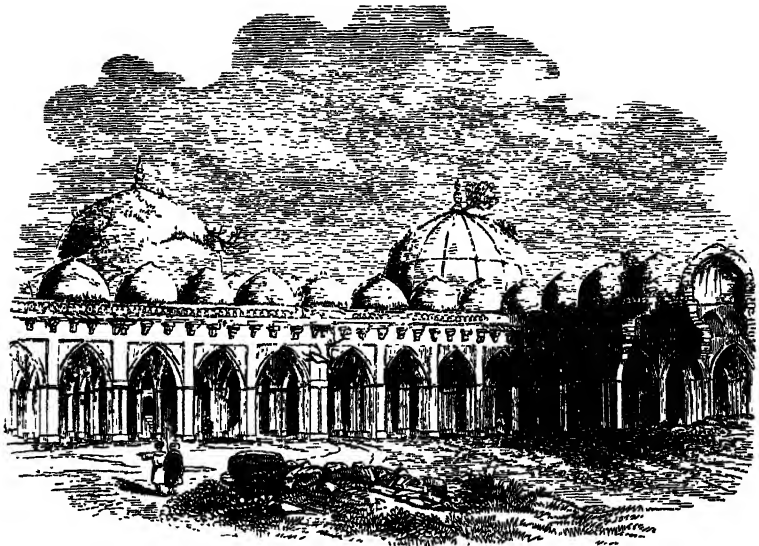
Plan of Mosque at Mandu. No scale.

having omitted, for the sake of uniformity, to widen the central avenues on the intersection of which the domes stand. It follows from this that the four sides of the octagon supporting the dome, which are parallel to the sides of the court, are shorter than the four diagonal sides. Internally, this produces a very awkward appearance; but it could not have been avoided except by running into another difficulty—that of having oblong spaces at the intersections of the wider aisles with the

narrower, to which the smaller domes must have been fitted. Perhaps, on the whole, the architect took the less inconvenient course of the two.

The interior of the court is represented in Woodcut No. 309, and for simple grandeur and expression of power it may, perhaps, be taken as one of the very best specimens now to be found in India. It is, however, fast falling to decay, and a few years more may deprive it of most of that beauty which so impressed me when I visited it in 1839.

The tomb of the founder, which stands behind the mosque, though not remarkable for size, is a very grand specimen of the last resting-



309. Courtyard of Great Mosque at Mandu. (From a Sketch by the Author.)

place of a stern old Pathan king. Both internally and externally it is reveted with white marble, artistically, but not constructively, applied, and consequently in many places peeling off. The light is only admitted by the doorway and two small windows, so that the interior is gloomy, but not more so than seems suitable to its destination.

On one side of the mosque is a splendid Dharmasala, or hall, 230 ft. long, supported by three ranges of pillars, twenty-eight in each row. These are either borrowed from a Hindu edifice, or formed by some native architect from stones originally Hindu, and on the north side is a porch, which is avowedly only a re-erection of the pillars of a Jaina dome.

The palaces of Mandu are, however, perhaps even more remarkable than its mosques. Of these the principal is called Jehaj Mehal, from its being situated between two great tanks—almost literally in the water, like a “ship.” It is so covered with vegetation that it is almost impossible to sketch or photograph it,¹ but its mass and picturesque outline make it one of the most remarkable edifices of its date; very unlike the refined elegance afterwards introduced by the Moguls, but well worthy of being the residence of an independent Pathan chief of a warrior state.

The principal apartment is a vaulted hall, some 24 ft. wide by

¹ A view of this palace, but not from the best point of view, will be found in Elliot's ‘Views in the East.’

twice that length, and 24 ft. in height, flanked by buttresses massive enough to support a vault four times its section. Across the end of the hall is a range of apartments three storeys in height, and the upper ones adorned with rude, bold, balconied windows. Beyond this is a long range of vaulted halls, standing in the water, which were apparently the living apartments of the palace. Like the rest of the palace they are bold, and massive to a degree seldom found in Indian edifices, and produce a corresponding effect.

On the brink of the precipice overlooking the valley of the Nerbudda is another palace, called that of Baz Bahadur, of a lighter and more elegant character, but even more ruined than the northern palace, and scattered over the whole plateau are ruins of tombs and buildings of every class and so varied as almost to defy description. In their solitude, in a vast uninhabited jungle, they convey as vivid an impression of the ephemeral splendour of these Mahomedan dynasties as anything in India, and, if illustrated, would alone suffice to prove how wonderfully their builders had grasped the true elements of architectural design.

CHAPTER VII.

BENGAL.

CONTENTS.

Kudam ul Roussoul Mosque, Gaur—Adinah Mosque, Maldah.

CAPITAL—GAUR.

It is not very easy to understand why the architects of Malwa should have adopted a style so essentially arcuate as that which we find in the capital, while their brethren, on either hand, at Jaunpore and Ahmedabad, clung so fondly to a trabeate form wherever they had an opportunity of employing it. The Mandu architects had the same initiation to the Hindu forms in the mosques at Dhar ; and there must have been innumerable Jaina temples to furnish materials to a far greater extent than we find them utilised, but we neither find them borrowing nor imitating, but adhering steadily to the pointed-arch style, which is the essential characteristic of their art in foreign countries. It is easy to understand, on the other hand, why in Bengal the trabeate style never was in vogue. The country is practically without stone, or any suitable material for forming either pillars or beams. Having nothing but brick, it was almost of necessity that they employed arches everywhere, and in every building that had any pretensions to permanency. The Bengal style being, however, the only one wholly of brick in India Proper, has a local individuality of its own, which is curious and interesting, though, from the nature of the material, deficient in many of the higher qualities of art which characterise the buildings constructed with larger and better materials. Besides elaborating a pointed-arched brick style of their own, the Bengalis introduced a new form of roof, which has had a most important influence on both the Mahomedan and Hindu styles in more modern times. As already mentioned in describing the chuttrie at Alwar (*ante*, p. 474), the Bengalis, taking advantage of the elasticity of the bambu, universally employ in their dwellings a curvilinear form of roof, which has become so familiar to their eyes, that they consider it beautiful (Woodcut No. 310). It is so in fact when bambu and thatch are the materials employed, but when translated into stone or brick architecture, its taste is more questionable. There

is, however, so much that is conventional in architecture, and beauty depends to such an extent on association, that strangers are hardly fair judges in a case of this sort. Be this as it may, certain it is, at all events, that after being elaborated into a feature of permanent architecture in Bengal, this curvilinear form found its way in the 17th century to Delhi, and in the 18th to Lahore, and all the intermediate buildings from, say A.D. 1650, betray its presence to a greater or less extent.



Modern Curved Form of Roof.

It is a curious illustration, however, of how much there is in architecture that is conventional and how far familiarity may render that beautiful which is not so abstractedly, that while to the European eye this form always remains unpleasing, to the native eye—Hindu or Mahomedan—it is the most elegant of modern inventions.¹

Even irrespective, however, of its local peculiarities, the architecture of Gaur, the Mahomedan capital of Bengal, deserves attention for its extent and the immense variety of detail which it displays. Bengal, apparently because it was so distant from the capital, was erected into a separate kingdom almost simultaneously with Delhi itself. Mahommed Bakhtiar Khilji, governor of Berar under Kutub ud-din, became first king of the dynasty in A.D. 1203, and was succeeded by a long line of forty-eight kings, till the state was absorbed into Akbar's vast kingdom in A.D. 1573, under Daud Khan ben Suleiman. Though none of these kings did anything that entitles them to a place in general history, they possessed one of the richest portions of India, and employed their wealth in adorning their capital with buildings, which, when in a state of repair, must have been gorgeous, even if not always in the best taste. The climate of Bengal is, however, singularly inimical to the preservation of architectural remains. If the roots of a tree of the fig kind once find a resting-place in any crevice of a building, its destruction is inevitable; and even without this, the luxuriant growth of the jungle hides the building so completely, that it is sometimes difficult to discover it—always to explore it. Add to this that Gaur is singularly well suited to facilitate the removal of materials by water-carriage. During the summer inundation, boats can float up to any of the ruins, and after embarking

¹ In this respect it is something like the curvilinear pediments which Roman and Italian architects employed as window heads. Though detestable in themselves, yet we use and admire them because we are accustomed to them.

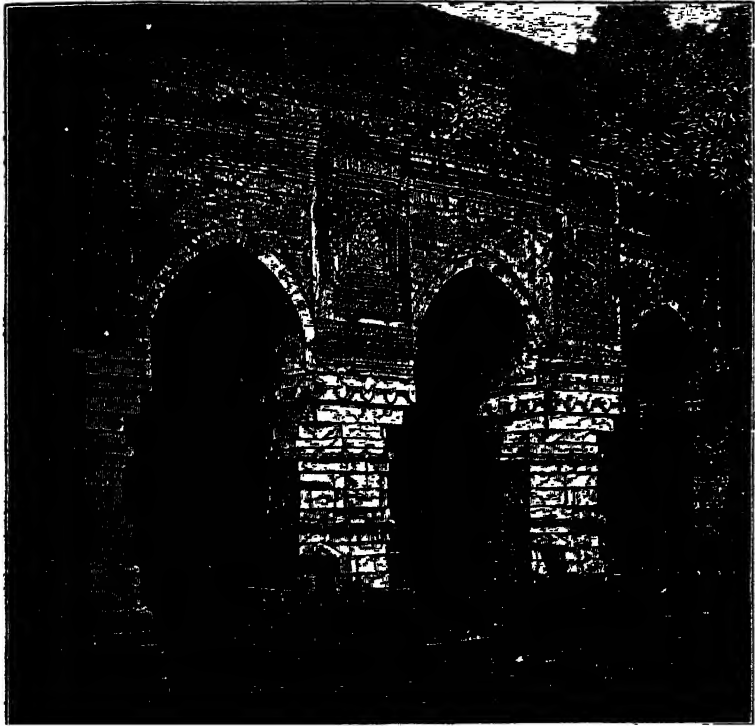
stones or bricks, drop down the stream to any new capital that may be rising. It thus happens that Moorshedabad, Hoogly, and even Calcutta, are rich in spoils of the old Pathan capital of Bengal, while it has itself become only a mass of picturesque but almost indistinguishable ruins.

The city of Gaur was a famous capital of the Hindus long before it was taken possession of by the Mahomedans. The Sên and Bellala dynasties of Bengal seem to have resided here, and no doubt adorned it with temples and edifices worthy of their fame and wealth. These, however, were probably principally in brick, though adorned with pillars and details in what used to be called black marble, but seems to be an indurated potstone of very fine grain, and which takes a beautiful polish. Many fragments of Hindu art in this material are found among the ruins; and if carefully examined might enable us to restore the style. Its interest, however, principally lies in the influence it had on the Mahomedan style that succeeded it. It is neither like that of Delhi, nor Jaunpore, nor any other style, but one purely local, and not without considerable merit in itself; its principal characteristic being heavy short pillars of stone supporting pointed arches and vaults, in brick—whereas at Jaunpore, for instance, light pillars carried horizontal architraves and flat ceilings.

The general character of the style will be seen in the example from a mosque called the Kudam ul Roussoul at Gaur, and is by no means devoid of architectural merit (Woodcut No. 311). The solidity of the supports go far to redeem the inherent weakness of brick architecture, and by giving the arches a firm base to start from, prevents the smallness of their parts from injuring the general effect. It also presents, though in a very subdued form, the curvilinear form of the roof, which is so characteristic of the style.

In Gaur itself there are two very handsome mosques—the Golden and the Barah Durwaza, or twelve-doored. Both their façades are in stone, and covered with foliated patterns in low-relief, borrowed evidently from the terra-cotta ornaments which were more frequently employed, and continued a favourite mode of adorning façades down to the time of the erection of the Kantonuggur temple illustrated above (Woodcut No. 263). In the interior their pillars have generally been removed, and the vaults consequently fallen in, so that it is not easy to judge of their effect, even if the jungle would admit of the whole area being grasped at once. Their general disposition may be judged of, however, by the plan on page 549 (Woodcut No. 312) of the Adinah mosque at Maldah, which formed at the time it was erected the northern suburb of the capital. From inscriptions upon it, it appears that this mosque was erected by Sikander Shah, one of the most illustrious of his race (A.D. 1358–1367), with the intention of being himself buried within its precincts, or in its immediate neigh-

bourhood. Its dimensions are considerable, being nearly 500 ft. north and south, and nearly 300 ft. east and west. In the centre it contains a courtyard, surrounded on all sides by a thick wall of brick, divided by eighty-eight similar arched openings, only one of which, that in the centre of the west side facing Mecca, is wider and more dignified than the rest. The roof in like manner is supported by 266 pillars of black hornblende, similar in design to those represented in Woodcut No. 311. They are bold and pleasing in design, but it must be confessed wanting in variety. These with the walls support no less than



311.

Kadam ul Roussoul Mosque, Gaur. (From a Photograph.)

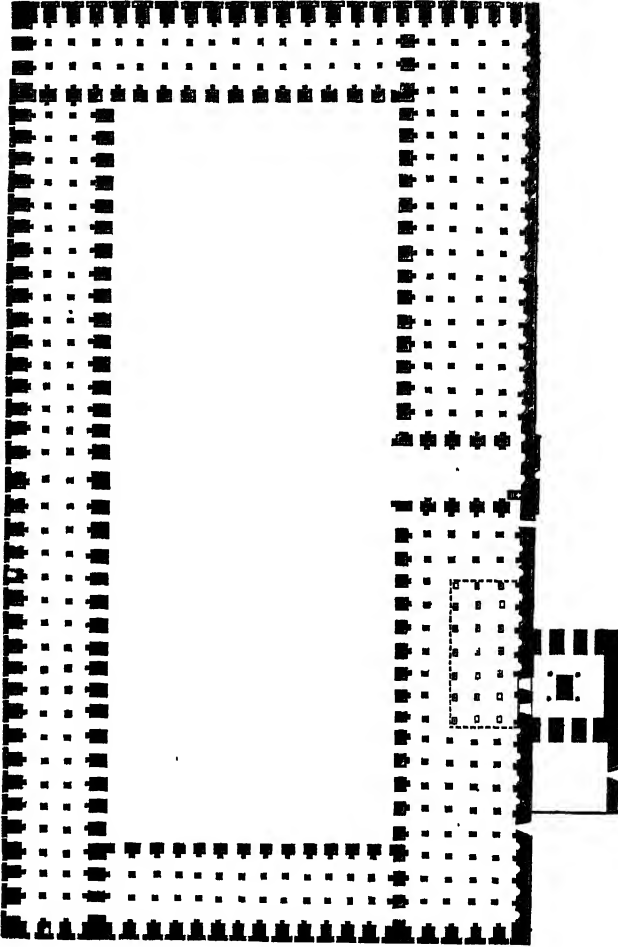
385 domes, all similar in design and construction. The only variation that is made is where a platform, called the Padshah ka Takht, or King's Throne, divides a part of the building into two storeys.¹

A design, such as that of the Adinah mosque, would be appropriate

¹ These particulars are taken principally from Buchanan Hamilton's 'Statistics of Dinajepore,' published by Mont-

gomery Martin in his 'Eastern India,' 1838, vol. ii. p. 649, *et seqq.*

for a caravanserai ; but in an edifice where expression and beauty were absolutely required it is far too monotonous. The same defect runs through the whole group ; and though their size and elegance of details, joined with the picturesque state of richly foliaged ruin in which they are now found, make them charming subjects for the



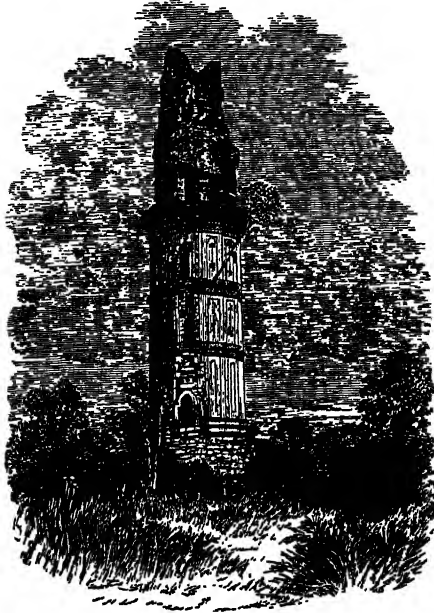
312.

Plan of Adinah Mosque, Maldah. Scale 100 ft. to 1 in.

pencil, they possess all the defects of design we remarked in the great halls of a thousand columns in the south of this country.¹ It seems, indeed, almost as if here we had again got among the Tamil race,

and that their peculiarities were reappearing on the surface, though dressed in the garb of a foreign race.

One of the most interesting of the antiquities of the place is a minar, standing in the fort (Woodcut No. 313). For two-thirds of the height it is a polygon of twelve sides; above that circular, till it attains the height of 84 ft. The door is at some distance from the ground, and altogether it looks more like an Irish round-tower than any other example known, though it is most improbable that there should be any connexion between the two forms. It is evidently a pillar of victory—a *Jaya Stambha*—such as the *Kutub Minar* at Delhi, and those at Coel, Dowlutabad, and elsewhere. There is, or was, an inscription on this monument which ascribed its erection to



313. Minar at Gaur. (From a Photograph by J. H. Ravenshaw, B.C.S.)

Feroze Shah. If this is so, it must be the king of that province who reigned in Gaur A.H. 702–715, or A.D. 1302–1315,¹ and the character of the architecture fully bears out this ascription.² The native tradition is, that a saint, Peer Asa, lived, like Simon Stylites, on its summit!

Besides these, there are several of the gateways of Gaur which are of considerable magnificence. The finest is that called *Dhakkhal*, which, though of brick, and adorned only with terra-cotta ornaments, is as grand an object of its class as is to be found anywhere. The gate of the citadel, and the southern gate of the city, are very noble examples of what can be done with bricks, and bricks only. It is not, however, in the dimensions of its buildings or the beauty of their

¹ Initial coinage of Bengal, by Edward Thomas, B.C.S. 1866.

² In the woodcut, though not so clearly as in the photograph, will be observed the long pendent root of the tree which has been planted by some bird in the

upper gallery. In another year or two it will reach the ground, and then down comes the minar. Any one with a pocket-knife might save it by five minutes' work. But *Cui bono?* says the Saxon.

details that the glory of Gaur resides ; it is in the wonderful mass of ruins stretching along what was once the high bank of the Ganges, for nearly twenty miles, from Maldah to Maddapore—mosques still in use, mixed with mounds covering ruins—tombs, temples, tanks and towers, scattered without order over an immense distance, and half buried in a luxuriance of vegetation which only this part of India can exhibit. What looks poor, and may be in indifferent taste, drawn on paper and reduced to scale, may give an idea of splendour in decay when seen as it is, and in this respect there are none of the ancient capitals of India which produce a more striking, and at the same time a more profoundly melancholy, impression than these ruins of the old Pathan capital of Bengal.

CHAPTER VIII.

KALBURGAH.

CONTENTS.

The Mosque at Kalburgah.

CHRONOLOGY.

Ala ud-din Bahmani, a servant in Ma-		Nizam Shah	A.D. 1461
hamud Tugluck's court	A.D. 1347	Kullam Ullah, last of Bahmani dynasty	1525
Muhammad Shah. Ghazi	1358		
Mujahid Shah	1375	Kasin Berid, founder of Berid Shahi	
Mahmid Shah	1378	dynasty	1492
Feroze Shah married daughter of Vija-		Ala Rena Shah assumes royalty . . .	1549
yanagar raja	1397	Amir Berid Shah, last of his race . .	1609
Ahmad Shah, capital Bidar	1422		

THE campaigns of Ala ud-din and of Tugluck Shah in the beginning of the 14th century extended the fame and fear of the Moslem power over the whole peninsula of India, as far as Cape Comorin and the Straits of Manaar. It was almost impossible, however, that a state in the semi-barbarous condition of the Pathans of that day could so organise a government as to rule so extensive and varied an empire from one central point, and that as remote as Delhi. Tugluck Shah felt this, and proposed to establish the capital at Dowlutabad. If he had been able to accomplish this, the whole of the south might have been permanently conquered. As it was, the Bellala dynasty of Hullabid was destroyed in A.D. 1311,¹ and that of Worangul crippled but not finally conquered till some time afterwards,² while the rising power of Vijayanagar formed a barrier which shielded the southern states—the Chera, Chola, Pandya—against Mahomedan encroachment for some centuries after that time; and but for the establishment of Mahomedan kingdoms independent of the central power at Delhi, the Dekhan might have been lost to the Moslems, and the Hindus held their own for a long time, perhaps for ever, to the south of the Vindhya range.

The first of those dynasties that successfully established its independence was that called the Bahmani, from its founder, Hasan Ganju, being the servant of a Brahman in Mahamud Tugluck's court, and owing his rise to his master, he adopted his name as a title in gratitude. He established himself at Kalburgah, an ancient

Ante, p. 393.

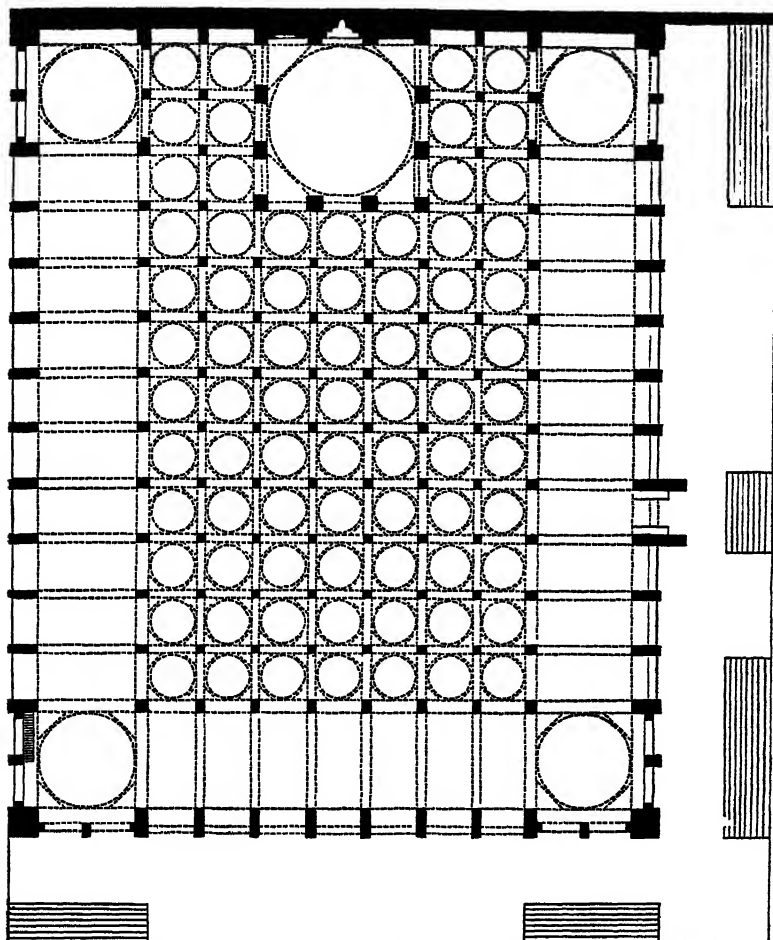
² Elphinstone's 'India,' vol. ii. p. 57.

Hindu city of the Dekhan, and with his immediate successors not only held in check the Hindu sovereigns of Worangul and Vijayanagar, but actually forced them to pay him tribute. This prosperous state of affairs lasted for nearly a century, when Ahmad Shah I. (A.D. 1422-1425), for some reason not explained, transferred the seat of power to Bidar. They lingered on for another century or more, latterly known as the Berid Shahis, till they were absorbed in the great Mogul empire in A.D. 1609. Long before that, however, their place in the Dekhan had been taken by the Bijapur Adil Shahis, who established themselves there A.D. 1489.

During the short supremacy of Kalburgah as capital of the Dekhan (A.D. 1347-1435), it was adorned with several important buildings, among which was a mosque, one of the most remarkable of its class in India (Woodcuts Nos. 314, 315). Its dimensions are considerable, though not excessive: it measures 216 ft. east and west, and 176 ft. north and south, and consequently covers 38,016 sq. ft. Its great peculiarity, however, is that, alone of all the great mosques in India, the whole of the area is covered over. Comparing it, for instance, with the mosque at Mandu, which is the one in other respects most like it, it will be observed that the greater part of its area is occupied by a courtyard surrounded by arcades. At Kalburgah there is no court, the whole is roofed over, and the light is admitted through the side walls, which are pierced with great arches for this purpose on all sides except the west (Woodcut No. 316).

Having only one example of the class, it is not easy to form an opinion which of the two systems of building is the better. There is a repose and a solemnity which is singularly suited to a place of prayer, in a courtyard enclosed by cloisters on all sides, and only pierced by two or three doors; but, on the other hand, the heat and glare arising from reflection of the sun's rays in these open courts is sometimes most painful in such a climate as India, and nowhere, so far as I know, was it ever even attempted to modify this by awnings. On the Kalburgah plan, on the contrary, the solid roof covering the whole space afforded protection from the sun's rays to all worshippers, and every aisle being open at one or both ends, prevented anything like gloom, and admitted of far freer ventilation than was attainable in the enclosed courts, while the requisite privacy could easily have been obtained by a low enclosing wall at some distance from the mosque itself. On the whole, my impression is that the Kalburgah plan is the preferable one of the two, both for convenience and for architectural effect, so much so indeed, that it is very difficult to understand why, when once tried, it was never afterwards repeated. Probably the cause of its being abandoned was the difficulty of draining so extensive a flat roof during the rains. Any settlement or any crack must have been fatal; yet this mosque stands in seemingly good

repair, after four centuries of comparative neglect. Whichever way the question is decided, it must be admitted that this is one of the finest of the old Pathan mosques of India, at least among those which

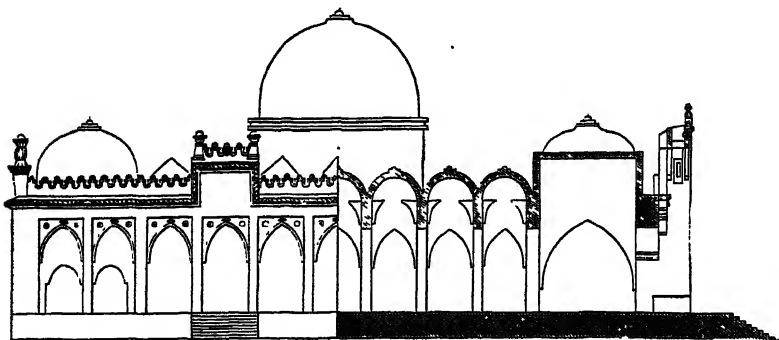


314. Mosque at Kalburgah. (From a Plan by the Hon. Sir Arthur Gordon.) Scale 50 ft. to 1 in.

are built wholly of original materials—and in the arcuate style—of Mahomedan art. Those at Delhi and Ajmir are more interesting of course, but it is from adventitious circumstances. This owes its greatness only to its own original merits of design.¹

¹ For the plan and section of this of the Fiji Islands. He made the plans mosque, and all indeed I know about it, himself, and most liberally placed them I am indebted to my friend the Hon. at my disposal.
Sir Arthur Gordon, at present governor

Besides the mosque, there is in Kalburgah a bazaar, 570 ft. long by 60 ft. wide, over all, adorned by a range of sixty-one arches on either hand, supported by pillars of a quasi-Hindu character, and



315. Half elevation half section of the Mosque at Kalburgah. Scale 50 ft. to 1 in.



316. View of the Mosque at Kalburgah. (From a Photograph.)

with a block of buildings of a very ornamental character at either end. I am not aware of anything of its class more striking in any part of India. The arcades that most resemble this are those that line the

street called the Street of the Pilgrims, at Vijayanagar, which may be contemporary with this bazaar.¹

There are other buildings, especially one gigantic archway, in the city of Kalburgah, the use of which is not apparent, and some very grand old tombs, with sloping walls; but we must wait for further information before they can be utilised in a history of Indian architecture.

After the seat of government was removed to Bidar by Ahmad Shah, A.D. 1422-1435, the new capital was adorned by edifices worthy of the greatness of the dynasty, but now all apparently ruined. Among these the most magnificent appears to be the madrissa erected by Mahomet Gaun, the faithful but unfortunate minister of the tyrant Mahmūd II. It appears to have been finished two years before his death, in A.D. 1481, and in Ferishta's time was one of the most complete and flourishing establishments of its class in India.² Unfortunately, when the place was besieged by Aurungzebe, a quantity of gunpowder was stored in its vaults, and exploded, either accidentally or by design, so as to ruin one wing. Since then the building has been disused, but so far as can be judged from such imperfect information as is available, it must have been one of the most splendid buildings of its day.³ The tombs too of the Berid Shahi dynasty, which reigned in Bidar from A.D. 1492-1609, are of considerable splendour, and rival those of Golcondah in extent. Bidar, however, has not yet been visited by anyone who has had the power or opportunity of drawing or describing its monuments in such a manner as to enable another to utilise them for historical purposes, and till this is done, a knowledge of them must remain among the many desiderata in Indian art.

¹ I have photographs, but no measurements, of this street.

² Brigg's translation of Ferishta, vol. ii. p. 510.

³ There is a view of it from a sketch by Col. Meadows Taylor, in the 'Oriental Annual' for 1840.

CHAPTER IX.

BIJAPUR.

CONTENTS.

The Jumma Masjid — Tombs of Ibrahim and Mahmud — The Audience Hall .
Tomb of Nawab Amir Khan, near Tatta.

CHRONOLOGY.

Yusuf Khan Adil Shah.	A.D. 1501	Ali Adil Shah	A.D. 1557
Ismail Adil Shah	1511	Ibrahim Adil Shah II.	1579
Mulla Adil Shah	1534	Muhammad	1626
Ibrahim Adil Shah I.	1535	Ali Adil Shah II.	1660

If the materials existed for the purpose, it would be extremely interesting, from a historical point of view, to trace the various styles that grew out of each other as the later dynasties of the Dekhan succeeded one another and strove to surpass their predecessors in architectural magnificence in their successive capitals. With the exception, however, of Bijapur, none of the Dekhani cities produced any edifices that, taken by themselves irrespective of their surroundings and historical importance, seem to be of any very great value in an artistic sense.

Burhampur, which was the capital of the Faruki dynasty of Kandeish, from A.D. 1370–1596, does possess some buildings remarkable for their extent and picturesque in their decay, but of very little artistic value, and many of them—especially the later ones—in very questionable taste. Ahmednugger, the capital of the Nizam Shahi dynasty, A.D. 1490–1607, is singularly deficient in architectural grandeur, considering how long it was the capital of an important dynasty; while if Golcondah, the chosen seat of the Kutub Shahi dynasty, A.D. 1512–1672, has any buildings that are remarkable, all that can be said is that they have not yet been drawn or described. The tombs of the kings of this dynasty, and of their nobles and families, do form as extensive and as picturesque a group as is to be found anywhere; but individually they are in singularly bad taste. Their bases are poor and weak, their domes tall and exaggerated, showing all the faults of the age in which they were executed, but still not unworthy of a place in history if the materials existed for illustrating them properly.

As mentioned above, the Bahmani dynasty of Kalburgah main-

tained the struggle against the Hindu principalities of the south for nearly a century and a half, with very little assistance from either the central power at Delhi or their cognate states in the Dekhan. Before the end of the 15th century, however, they began to feel that decay inherent in all Eastern dynasties; and the Hindus might have recovered their original possessions, up to the Vindhya at least, but for the appearance of a new and more vigorous competitor in the field in the person of Yusaf Khan, a son of Amurath II. of Anatolia. He was thus a Turk of pure blood, and, as it happens, born in Constantinople, though his mother was forced to fly thence while he was still an infant. After a varied career he was purchased for the body-guard at Bidar, and soon raised himself to such pre-eminence that on the defeat of Dustur Dinar, in 1501, he was enabled to proclaim his independence and establish himself as the founder of the Adil Shahi dynasty of Bijapur.

For the first sixty or seventy years after their accession, the struggle for existence was too severe to admit of the Adil Shahis devoting much attention to architecture. The real building epoch of the city commences with Ali, A.D. 1557, and all the important buildings are crowded into the 100 years which elapsed between his accession and the wars with Aurungzebe, which ended in the final destruction of the dynasty

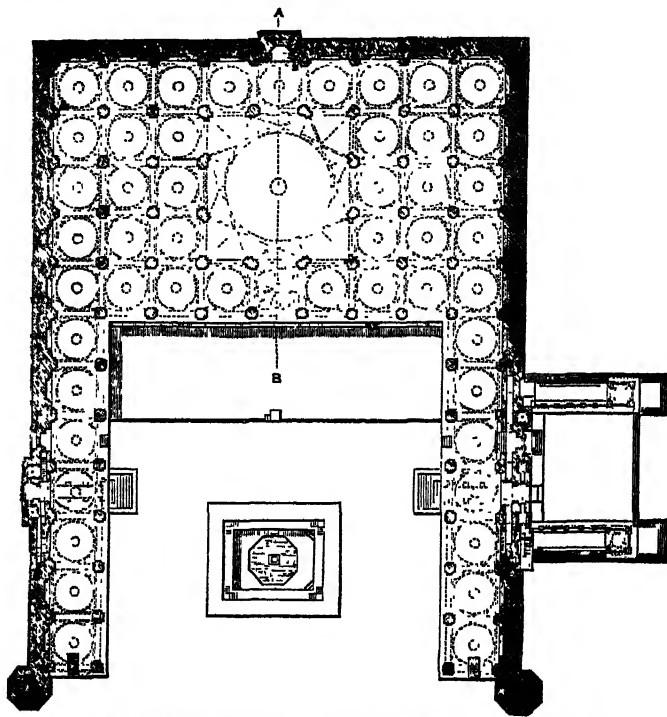
During that period, however, their capital was adorned with a series of buildings as remarkable as those of any of the Mahomedan capitals of India, hardly excepting even Agra and Delhi, and showing a wonderful originality of design not surpassed by those of such capitals as Jaunpore or Ahmedabad, though differing from them in a most marked degree.

It is not easy now to determine how far this originality arose from the European descent of the Adil Shahis and their avowed hatred of everything that belonged to the Hindus, or whether it arose from any local circumstances, the value of which we can now hardly appreciate. My impression is, that the former is the true cause, and that the largeness and grandeur of the Bijapur style is owing to its quasi-Western origin, and to reminiscences of the great works of the Roman and Byzantine architects.

Like most Mahomedan dynasties, the Adil Shahis commenced their architectural career by building a mosque and madrissa in the fort at Bijapur out of Hindu remains. How far the pillars used there by them are *in situ*, or torn from other buildings, we are not informed. From photographs, it would appear that considerable portions of them are used at least for the purposes for which they were intended; but this is not incompatible with the idea that they were removed from their original positions and readapted to their present purposes. Be this as it may, as soon as the dynasty had

leisure to think really about the matter, they abandoned entirely all tendency to copy Hindu forms or Hindu details, but set to work to carry out a pointed-arched, or domical style of their own, and did it with singular success.¹

The Jumma Musjid, which is one of the earlier regular buildings of the city, was commenced by Ali Adil Shah (A.D. 1557-1579), and, though continued by his successors on the same plan, was never completely finished, the fourth side of the courtyard with its great



317. Plan of Jumma Musjid, Bijapur. (From a Drawing by A. Cumming, C.E.)
Scale 100 ft. to 1 in.

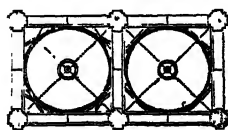
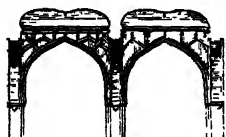
gateway not having been even commenced when the dynasty was overthrown. Even as it is, it is one of the finest mosques in India.

As will be seen from the plan (Woodcut No. 317), it would have

¹ Bijapur has been singularly fortunate, not only in the extent, but in the mode in which it has been illustrated. A set of drawings—plans, elevations, and details—were made by a Mr. A. Cumming, C.E., under the superintendence of Capt. Hart, Bombay Engineers, which, for beauty of drawing and accuracy of detail, are unsurpassed by any architectural

drawings yet made in India. These were reduced by photography, and published by me at the expense of the Government in 1859, in a folio volume with seventy-four plates, and afterwards in 1866 at the expense of the Committee for the Publication of the Antiquities of Western India, illustrated further by photographic views taken on the spot by Col. Biggs, R.A.

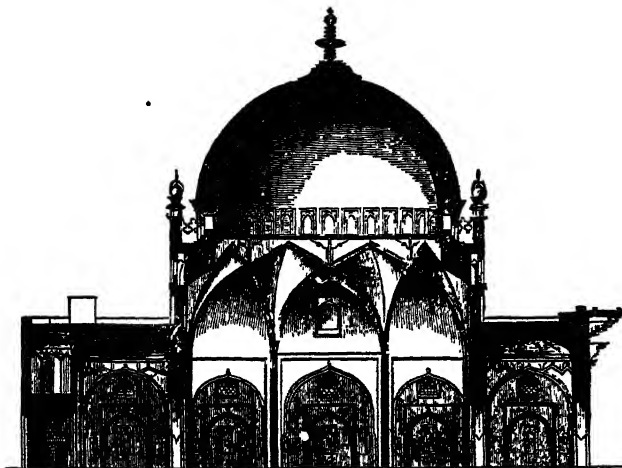
been, if completed, a rectangle of 331 ft. by 257 ft. The mosque itself is perfect, and measures 257 ft. by 145 ft., and consequently covers about 37,000 sq. ft. It consequently is in itself only a very little less than the mosque at Kalburgah; but this is irrespective of the wings, which extend 186 ft. beyond, so that if complete it would have covered about 50,000 sq. ft. to 55,000 sq. ft., or about the usual size of a mediæval cathedral. It is more remarkable, however, for the beauty of its details than either the arrangement or extent of its plan.



318. Plan and section of smaller Domes of Jumma Musjid. Scale 50 ft. to 1 in.

Each of the squares into which it is divided is roofed by a dome of very beautiful form, but so flat (Woodcut No. 318) as to be concealed externally in the thickness of the roof. Twelve of these squares are occupied in the centre by the great dome, 57 ft. in diameter in the circular part, but standing on a square measuring 70 ft. each way. The dimensions of this dome were immensely exceeded afterwards by that which covers the tomb of Mahmūd, constructed on the same plan and 124 ft. in

diameter; but the smaller dimensions here employed enabled the architect to use taller and more graceful outlines, and if he had had the courage to pierce the niches at the base of his dome, and make



319. Section on the line A B through the Great Dome of the Jumma Musjid. (From a Drawing by Mr. Gunning.) Scale 50 ft. to 1 in.

them into windows, he would probably have had the credit of designing the most graceful building of its class in existence.

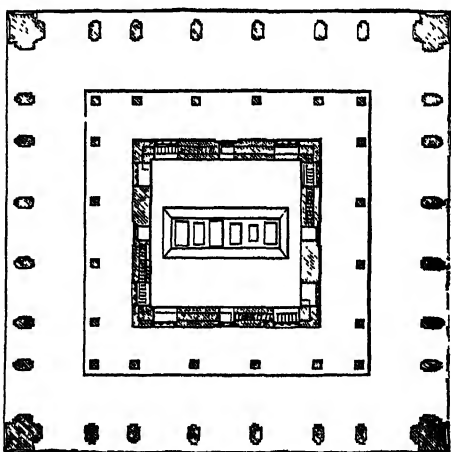
If the plan of this mosque is compared with that of Kalburgah

(Woodcut No. 314), it will be seen what immense strides the Indian architects had made in constructive skill and elegance of detail during the century and a half that elapsed between the erection of these two buildings. If they were drawn to the same scale this would be more apparent than it is at first sight; but on half the present scale the details of the Kalburgah mosque could hardly be expressed, while the largeness of the parts, and regularity of arrangement can, in the scale adopted, be made perfectly clear in the Bijapur example. The latter is, undoubtedly, the more perfect of the two, but there is a picturesqueness about the earlier building, and a poetry about its arrangements, that go far to make up for the want of the skill and the elegance exhibited in its more modern rival.

The tomb which Ali Adil Shah commenced for himself was a square, measuring about 200 ft. each way, and had it been completed as designed would have rivalled any tomb in India. It is one of the disadvantages, however, of the Turanian system of each king building his own tomb, that if he dies early his work remains unfinished. This defect is more than compensated in practice by the fact that unless a man builds his own sepulchre, the chances are very much against anything worthy of admiration being dedicated to his memory by his surviving relatives.

His successor Ibrahim, warned by the fate of his predecessor's tomb, commenced his own on so small a plan—116 ft. square—that

as he was blessed by a long and prosperous reign, it was only by ornament that he could render it worthy of himself. This, however, he accomplished by covering every part with the most exquisite and elaborate carvings. The ornamental inscriptions are so numerous that it is said the whole Koran is engraved on its walls. The cornices are supported by the most elaborate bracketing, the windows filled with tra-



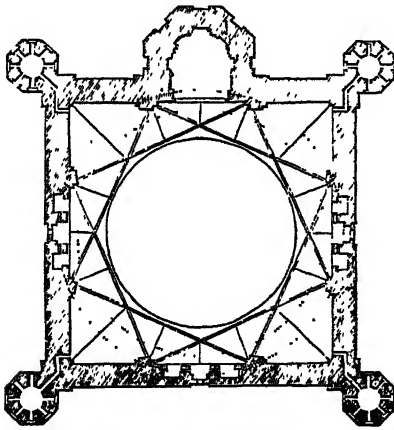
320. Tomb or Rozah of Ibrahim. (From a Plan by Mr. Cumming.) Scale 50 ft. to 1 in.

cery, and every part so richly ornamented that had his artists not been Indians it might have become vulgar. The principal apartment in the tomb is a square of 40 ft. each way, covered by a stone roof, perfectly flat in the centre, and supported only by a cove pro-

jecting 10 ft. from the walls on every side. How the roof is supported is a mystery which can only be understood by those who are familiar with the use the Indians make of masses of concrete, which, with good mortar, seems capable of infinite applications unknown in Europe. Above this apartment is another in the dome as ornamental as the one below it, though its only object is to obtain externally the height required for architectural effect, and access to its interior can only be obtained by a dark narrow stair in the thickness of the wall.

Besides the tomb there is a mosque to correspond: and the royal garden, in which these are situated, is adorned, as usual, internally with fountains and kiosks, and externally with colonnades and caravansaries for strangers and pilgrims, the whole making up a group as rich and as picturesque as any in India, and far excelling anything of the sort on this side of the Hellespont.

The tomb of his successor, Mahmūd, was in design as complete a contrast to that just described as can well be conceived, and is as remarkable for simple grandeur and constructive boldness as that of



Plan of Tomb of Mahmūd at Bijapur.
Scale 100 ft. to 1 in.

Ibrahim was for excessive richness and contempt of constructive proprieties. It is constructed on the same principle as that employed in the design of the dome of the great mosque (Woodcut No. 319), but on so much larger a scale as to convert into a wonder of constructive skill what, in that instance, was only an elegant architectural design.

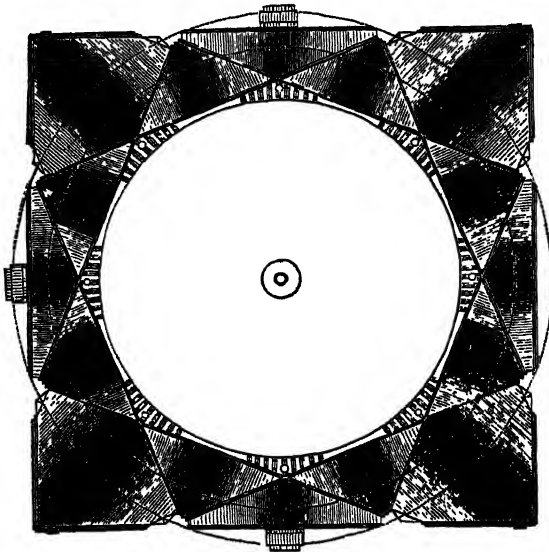
As will be seen from the plan, it is internally a square apartment, 135 ft. each way: its area consequently is 18,225

sq. ft., while that of the Pantheon at Rome is, within the walls, only 15,833 sq. ft.; and even taking into account all the recesses in the walls of both buildings, this is still the larger of the two.

At the height of 57 ft. from the floor-line the hall begins to contract, by a series of pendentives as ingenious as they are beautiful, to a circular opening 97 ft. in diameter. On the platform of these pendentives the dome is erected, 124 ft. in diameter, thus leaving a gallery more than 12 ft. wide all round the interior. Internally, the dome is 175 ft. high, externally 198 ft., its general thickness being about 10 ft.

The most ingenious and novel part of the construction of this

dome is the mode in which its lateral or outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut off the angles, but that, as shown in the plan, their arches intersect one another, and form a very considerable mass of masonry perfectly stable in itself; and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome. If the whole edifice thus balanced has any tendency to move, it is to fall inwards, which from its circular form is impossible; while the action of the weight of the pendentives being in the opposite direction to that of the dome, it acts like a tie, and keeps the whole in equilibrium, without interfering at all with the outline of the dome.



322. Pendentives of the Tomb of Mahmūd, looking upwards. (From a Drawing by Mr. Cumming.) Scale 60 ft. to 1 in.

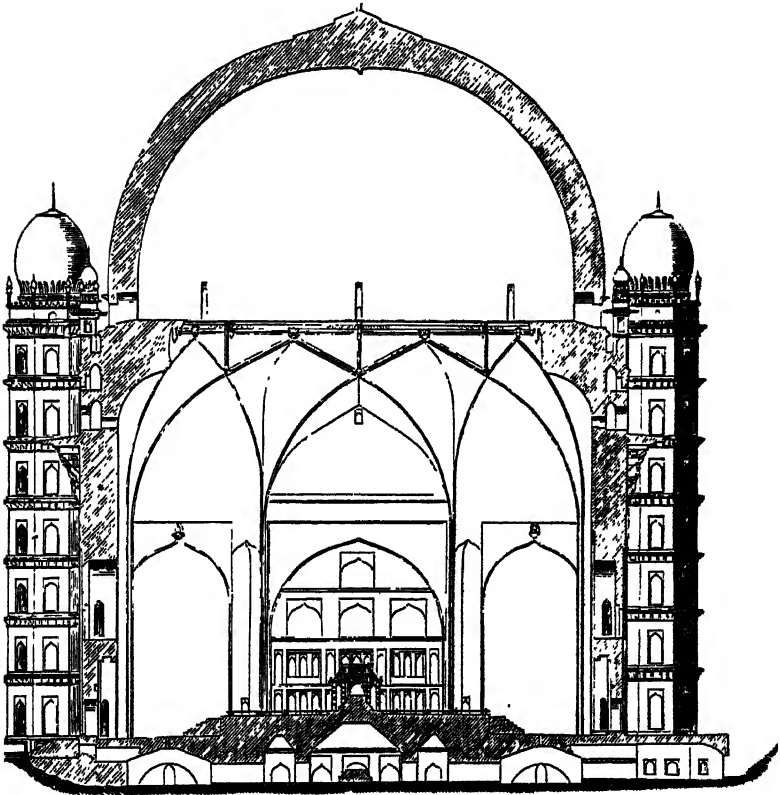
In the Pantheon and most European domes a great mass of masonry is thrown on the haunches, which entirely hides the external form, and is a singularly clumsy expedient in every respect compared with the elegant mode of hanging the weight inside.

Notwithstanding that this expedient gives the dome a perfectly stable basis to stand upon, which no thrust can move, still, looking at the section (Woodcut No. 323), its form is such that it appears almost paradoxical that such a building should stand. If the section represented an arch or a vault, it is such as would not stand one hour; but the dome is itself so perfect as a constructive expedient, that it is almost as difficult to build a dome that will fall as it is to build a

vault that will stand. As the dome is also, artistically, the most beautiful form of roof yet invented, it may be well, before passing from the most extraordinary and complex example yet attempted anywhere, to pause and examine a little more closely the theory of its construction.

Let us suppose the diagram to represent the plan of a perfectly flat dome 100 ft. in diameter, and each rim consequently 10 ft. wide.

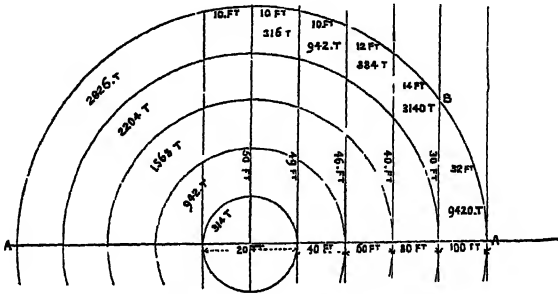
Further assuming for convenience that the whole dome weighs



Section of Tomb of Mahmūd at Bijapur. Scale 50 ft. to 1 in.

7850 tons, the outer rim will weigh 2826 tons, or almost exactly as much as the three inner rims put together; the next will weigh 2204, the next 1568, the next 942, and the inner only 314; so that a considerable extra thickness might be heaped on it, or on the two inner ones, without their preponderance at all affecting the stability of the dome; but this is the most unfavourable view to take of the case. To understand the problem more clearly, let us suppose the semicircle A A A (Woodcut No. 324) to represent the section of a hemispherical

dome. The first segment of this, though only 10 ft. in width, will be 30 ft. in height, and will weigh 9420 tons; the next, 10 ft. high and 10 ft. wide, will weigh 3140; the third, 10 ft. by 6 ft., will weigh only 1884; the fourth will weigh 942; and the central portion, as before, 316.



324.

Diagram illustrative of Domical Construction.

Now it is evident that the first portion, A B, being the most perpendicular, is the one least liable to disturbance or thrust, and, being also two-thirds of the whole weight of the dome, if steady and firmly constructed, it is a more than sufficient abutment for the remaining third, which is the whole of the rest of the dome.

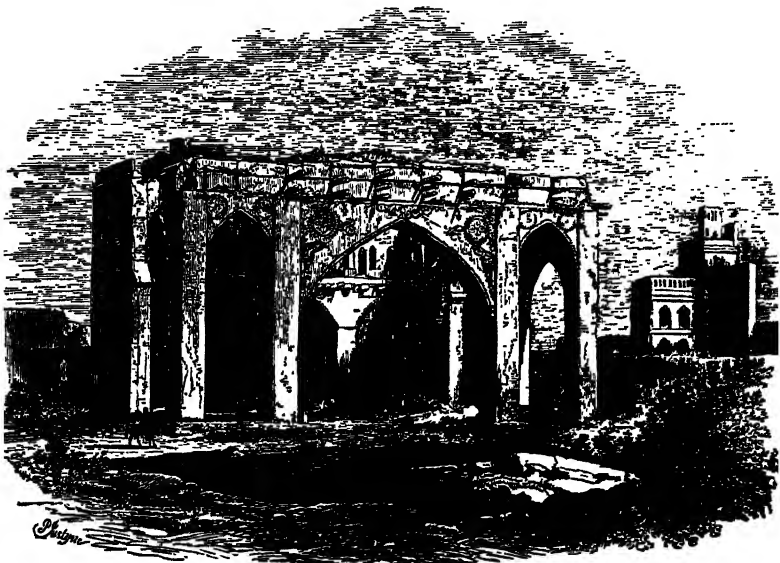
It is evident from an inspection of the figure, or from any section of the dome, how easy it must be to construct the first segment from the springing; and if this is very solidly built and placed on an immoveable basis, the architect may play with the rest; and he must be clumsy indeed if he cannot make it perfectly stable. In the East they did play with their domes, and made them of all sorts of fantastic forms, seeking to please the eye more than to consult the engineering necessities of the case, and yet it is the rarest possible contingency to find a dome that has fallen through faults in the construction.

In Europe architects have been timid and unskilled in dome-building; but with our present engineering knowledge it would be easy to construct far larger and more daring domes than even this of Mahmúd's tomb, without the smallest fear of accident.

The external ordonnance of this building is as beautiful as that of the interior. At each angle stands an octagonal tower eight storeys high, simple and bold in its proportions, and crowned by a dome of great elegance. The lower part of the building is plain and solid, pierced only with such openings as are requisite to admit light and air; at the height of 83 ft. a cornice projects to the extent of 12 ft. from the wall, or nearly twice as much as the boldest European architect ever attempted. Above this an open gallery gives lightness

and finish to the whole, each face being further relieved by two small minarets.

The same daring system of construction was carried out by the architects of Bijapur in their civil buildings. The great Audience Hall, for instance (Woodcut No. 325), opens in front with an arch 82 ft. wide, which, had it been sufficiently abutted, might have been a grand architectural feature; as it is, it is too like an engineering work to be satisfactory. Its cornice was in wood, and some of its supports are still in their places. Indeed, it is one of the peculiarities of the architecture of this city that, like the English architects in their roofs, those of Bijapur clung to wood as a constructive



325.

Audience Hall, Bijapur. (From a Photograph.)

expedient long after its use had been abandoned in other parts of India. The Ashur Moobaruk, one of the most splendid palaces in the city, is entirely open on one side, the roof being supported only by two wooden pillars with immense bracket-capitals; and the internal ornaments are in the same material. The result of this practice was the same at Bijapur as in England—far greater depth of framing and greater richness in architectural ornamentation, and an intolerance of constructive awkwardness which led to the happiest results in both countries.

Among the principal edifices in the city is one of those seven-storeyed palaces which come across us so strangely in all out-of-the-way corners of the world. Add to this that the Ashur Moobaruk has been converted by the Mahomedans into a relic-shrine to contain

some hairs of the Prophet's beard, and we have a picture of the strange difficulty of weaning a Tartar from the innate prejudices of his race.

Besides these two there are five other palaces within the walls some of them of great splendour, and numberless residences of the nobles and attendants of the court. But perhaps the most remarkable civil edifice is a little gateway, known as the Mehturi Mehal ("the Gate of the Sweeper")—with a legend attached to it too long to quote here. It is in a mixed Hindu and Mahomedan style, every part and every detail covered with ornament, but always equally appropriate and elegant. Of its class it is perhaps the best example in the country, though this class may not be the highest.

The gigantic walls of the city itself, $6\frac{1}{2}$ miles in circumference, are a work of no mean magnitude, and, combined with the tombs of those who built them, and with the ruins of the suburbs of this once great city, they make up a scene of grandeur in desolation, equal to anything else now to be found even in India.

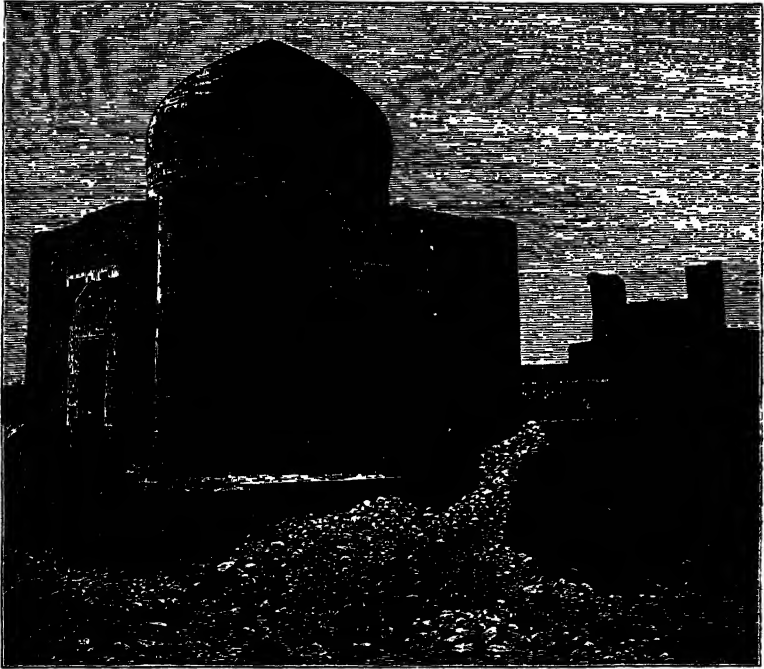
SCINDE.

Among the minor styles of Mahomedan art in India there is one that would be singularly interesting in a historical sense if a sufficient number of examples existed to elucidate it, and they were of sufficient antiquity to connect the style with those of the West. From its situation, almost outside India, the province of Scinde must always have had a certain affinity with Persia and the countries lying to the westward of the Indus, and if we knew its architectural history we might probably be able to trace to their source many of the forms we cannot now explain, and join the styles of the East with those of the West in a manner we cannot at present pretend to accomplish.

It is doubtful, however, whether the materials are in existence for doing this. The buildings in this province were always in brick, no stone being available; and though they are not exposed to the destructive agencies of vegetation like those of Bengal, the mortar is bad, and the bricks are easily picked out and utilised by the natives to build their huts or villages.

All we at present know belong to a series of tombs in the neighbourhood of Tatta, which were erected under the Mogul dynasty by the governors or great men of the province, during their sway. At least the oldest now known is that of Amir Khalleel Khan, erected in or about A.D. 1572, the year in which Akbar deposed the Jami dynasty and annexed Scinde to his empire. No tombs or mosques of the earlier dynasties have yet been edited, though they may exist. The known series extends from A.D. 1572–1640, and all show

a strongly-marked affinity to the Persian style of the same or an earlier age. One example must for the present suffice to explain their general appearance, for they are all very much alike. It is the tomb of the Nawab Amir Khan, who was governor of the province in the reign of Shah Jehan, from A.D. 1627–1632, and afterwards A.D. 1641–1650. The tomb was built apparently about A.D. 1640 (Woodcut No. 326). It is of brick, but was, like all the others of its class, ornamented with coloured tiles, like those of Persia generally, of great beauty of pattern and exquisite harmony of colouring. It is



326 Tomb of Nawab Amir Khan, near Tatta, A.D. 1640. (From a Photograph)

not a very monumental way of adorning a building, but, as carried out on the dome of the Rock at Jerusalem, in the middle of the 16th or in the mosque at Tabreez in the beginning of the 13th century,¹ and generally in Persian buildings, it is capable of producing the most pleasing effects.

Like the other tombs in the province, it is so similar to Persian buildings of the same age, and so unlike any other found at the same age in India Proper, that we can have little doubt as to the nationality of those who erected them.

¹ *Ante*, vol. ii. p. 553.

CHAPTER X.

MOGUL ARCHITECTURE.

CONTENTS.

Dynasties—Tomb of Mohammad Ghans, Gualior—Mosque at Futtehpoore Sikri—Akbar's Tomb, Secundra—Palace at Delhi—The Taje Mehal—The Mûti Musjid—Mosque at Delhi—The Imambara, Lucknow—Tomb of late Nawab, Junaghur.

CHRONOLOGY.

Baber	A.D. 1494	Akbar	A.D. 1556
Humayun	1531	Jehangir	1605
Shere Shah	1539	Shah Jehan	1629
Selim	1545	Aurangzebe	1659
— dies	1553	Bahadûr Shah	1707

TILL very recently, a description of the style introduced by the Mogul emperors would have been considered a complete history of Mahomedan architecture in India. It is the style which was described by Roe and Bernier, and all subsequent travellers. It was rendered familiar to the public in Europe by the drawings of Daniell in the beginning of this century, and, since Agra and Delhi became practically British cities, their buildings have been described, drawn, and photographed till they have become almost as well known as any found in Europe. It will take a very long time before even photography will render the mosques or tombs of such cities as Ahmedabad or Bijapur as familiar or as easily understood. Yet it is, perhaps, true to assert that the buildings of other dynasties, commencing with the mosques at the Kutub and at Ajmir, and continuing till the last Dekhani dynasty was destroyed by Aurungzebe, make up a whole as extensive and more interesting, in a historical point of view, than even all that was done by the Moguls. On the other hand, however, there is a unity in the works of that dynasty, and a completeness in their history, which makes the study of their art peculiarly fascinating, and some of their buildings will bear comparison, in some respects, with any architectural productions in any part of the world. Their buildings, however, are so original, and so unlike any of the masterpieces of art that we are generally acquainted with, that it is almost impossible to institute any comparison between them which shall be satisfactory. How, for instance, can we compare the Parthenon with the Taje? They are buildings of nearly equal size and magnificence, both in white marble, both

admirably adapted for the purposes for which they were built ; but what else have they in common ? The one is simple in its outline, and depending on pillars for its external adornment ; the other has no pillars, and owes its greatest effects to its singularly varied outline and the mode in which its various parts are disposed, many of them wholly detached from the principal mass. The Parthenon belongs, it is true, to a higher class of art, its sculptures raising it into the region of the most intellectual branch of phonetic art ; but, on the other hand, the exquisite inlay of precious stones at the Taje is so æsthetically beautiful as, in a merely architectural estimate, almost to bring it on a level with the Grecian masterpiece.¹

Though their value, consequently, may be nearly the same, their forms are so essentially different that they hardly look like productions of the same art ; and in an art so essentially conventional as architecture always is and must be, it requires long familiarity with any new form, and a knowledge of its origin and use, that can only be acquired by constant study, which makes it very difficult for a stranger to realise the real beauty that often underlies even the strangest forms. When, however, these difficulties are conquered, it will probably be found that there are few among the Eastern styles that deserve more attention, and would better repay any study that might be bestowed upon them, than the architecture of the Moguls.

Some little interruptions are experienced at the beginning of the narrative from the interpolation of the reigns of Shere Shah and his son Selim in the reign of Humayun. He was an Afghan by descent and an Indian by birth, and, had he been left to follow his own devices, would, no doubt, have built in the style of architecture used at Agra and Delhi before his countrymen were disturbed by the Mogul invasion. We have, it is true, very little to tell us what that style was during the 170 years that elapsed between the death of Tugluck Shah and the first invasion of Baber, but it seems to have been singularly plain and solid, and very unlike the florid art introduced by the Moguls, and practised by Shere Shah and his son apparently in rivalry to the new master of Hindustan. So little difference is there, however, between the architecture of Shere Shah

¹ Adopting the numerical scale described in the introduction to the 'True Principles of Beauty in Art,' p. 140, I estimated the Parthenon as possessing 4 parts of technic value, 4 of æsthetic, and 4 phonetic, or 24 as its index number, being the highest known. The Taje I should on the contrary estimate as possessing 4 technic, 5 æsthetic, and

2 phonetic, not that it has any direct phonetic mode of utterance, but from the singular and pathetic distinctness with which every part of it gives utterance to the sorrow and affection it was erected to express. Its index number would consequently be 20, which is certainly as high as it can be brought, and near enough to the Parthenon for comparison at least.

and of Akbar that they must be treated as one style, beginning in great sobriety and elegance, and ending in something nearly approaching to wildness and exuberance of decoration, but still very beautiful—in some respects superior to the chaste but feeble elegance of the later Mogul style that succeeded it.

There is, again, a little difficulty and confusion in our having no examples of the style as practised by Baber and Humayun. The well-known tomb of the latter king was certainly built by his son Akbar; Baber was buried near Cabul, and no building known to be his has yet been identified in India. Yet that he did build is certain. In his own 'Memoirs' he tells us, "In Agra alone, and of the stone-cutters belonging to that place only, I every day employed on my palaces 680 persons; and in Agra, Sikri, Biana, Dhulpur, Gualior, and Koel, there were every day employed on my works 1491 stone-cutters."¹ In the following pages he describes some of these works, and especially a Bowlee of great magnificence he excavated in the fort of Agra.² This was in the year 1526, and he lived to carry on these works for five years longer. During the ten years that his son retained the empire, we learn from Ferishta and other sources that he adorned his capital with many splendid edifices: one, a palace containing seven pavilions or audience-halls—one dedicated to each of the planets, in which he gave audience on the day of the week dedicated to the planet of the day.³ There are traditions of a mosque he is said to have built on the banks of the Jumna, opposite where the Taje now stands; and his name is so frequently mentioned in connexion with buildings both at Agra and Delhi that there can be little doubt that he was a builder to as great an extent as the troubled character of his reign would admit of. But his buildings have perished, so that practically the history of Mogul architecture commences with the buildings of an Afghan dynasty who occupied the throne of India for sixteen years during the last part of Humayun's reign.

It is probable that before long very considerable light will be thrown upon the origin of the style which the Moguls introduced into India, from an examination of the buildings erected at Samarcand by Timur a hundred years before Baber's time (A.D. 1393-1404). Now that the city is in the hands of the Russians, it is accessible to Europeans. Its buildings have been drawn and photographed, but not yet described so as to be available for scientific purposes, but sufficiently so to indicate the direction in which light may be expected. Though a frightful savage in most respects, Timur was possessed of a true Turki love for noble architecture; and though he

¹ 'Memoirs,' translated by Erskine,
p. 384.

² 'Loc. cit., pp. 341-2.

³ Brigg's translation, vol. ii. p. 71.

generally massacred the inhabitants of any town that resisted him, he always spared the architects and artists, and sent them to work on the embellishment of his capitals. Samarcand was consequently filled with splendid edifices, but, so far as can be judged from the materials available, more resembling in style those of Persia than anything now known to exist in India. The bulbous dome appears everywhere, and was not known at that time in India, unless it was in the quasi-Persian province of Scinde. Coloured tiles were the favourite mode of decoration, and altogether their style was gorgeous in the extreme as compared with the sobriety of the later Pathan buildings in India. A few years hence all this may be made quite clear and intelligible, meanwhile we must pass on to

SHERE SHAH, A.D. 1539-1545.

Certainly one of the most remarkable men who ever ruled in northern India, though his reign was limited to only five years' duration; and during that brief space, disturbed by all the troubles incident to a usurpation, he left his impress on every branch of the administration. The revenue system, the police, the army administration, all the great reforms, in fact, which Akbar so successfully carried out, were commenced, and to some extent perfected, by this usurper, as the Moguls call him. In architecture, too, which most concerns us here, he certainly pointed out the path by which his successor reached such eminence.

The most perfect of his buildings that I am acquainted with is the mosque in the Purana Kilah at Delhi. The walls of this place were repaired by Humayun in A.D. 1533, and I do not feel quite sure he had not something to do with the mosque. According to the latest authorities, however, it is said to have been built—I have no doubt it was finished—by Shere Shah in A.D. 1541.¹ It is a single hall, with five openings in front through pointed arches of what we would call Tudor form, but beautifully varied in design, and arranged in panels carved with the most exquisite designs and ornamented with parti-coloured marbles. One important dome, pierced with twelve small windows, crowns the centre; it has, however, no minarets and no courtyard, but even without these adjuncts it is one of the most satisfactory buildings of its class in India.²

In the citadel at Agra there stands—or at least stood when I was

¹ Cunningham, 'Reports,' vol. i. p. 222.

² A description of this mosque is given in Mr. Carlyle's 'Report on the Buildings of Delhi,' forming part of Cuning-

ham's fourth volume, but like everything else most unsatisfactory. Neither plan nor dimensions are given, mere verbiage conveying no distinct meaning.

there—a fragment of a palace built by Shere Shah, or his son Selim, which was as exquisite a piece of decorative art as anything of its class in India. Being one of the first to occupy the ground, this palace was erected on the highest spot within the fort; hence the present Government, fancying this a favourable site for the erection of a barrack, pulled it down, and replaced it by a more than usually hideous brick erection of their own. This is now a warehouse, and looms, in whitewashed ugliness, over the marble palaces of the Moguls—a fit standard of comparison of the tastes of the two races.¹

Judging from the fragment that remains, and the accounts received on the spot, this palace must have gone far to justify the eulogium more than once passed on the works of these Pathans—that “they built like giants, and finished like goldsmiths:” for the stones seem to have been of enormous size, and the details of most exquisite finish. It has passed away, however, like many another noble building of its class, under the ruthless barbarism of our rule. Mosques we have generally spared, and sometimes tombs, because they were unsuited to our economic purposes, and it would not answer to offend the religious feelings of the natives. But when we deposed the kings and appropriated their revenues, there was no one to claim their now useless abodes of splendour. It was consequently found cheaper either to pull them down, or use them as residences or arsenals, than to keep them up, so that very few now remain for the admiration of posterity.

The tomb of Shere Shah has been already described (*ante*, p. 516), as it is essentially Pathan in style. It was erected at his native place in Behar, to the south of the Ganges, far from Mogul influence at that time, and in the style of severe simplicity that characterised the works of his race between the times of Tugluck and those of Behlol Lodi (A.D. 1450–1488), the last really independent king of his line.

It is not quite clear how much of the tomb was built by himself, or how much by his son Selim, who certainly finished it. Selim also built the Selimghur on an island in the Jumna, to which Shah Jehan afterwards added his palace in New Delhi. Whether, however, he erected any buildings inside is not certain—nothing at least now remains of any importance. Generally he seems to have carried on and completed his father’s buildings, and between them they have left a group of architectural remains which, if collected together and illustrated, would form an interesting chapter in the history of Indian-Mahomedan styles.²

¹ As I cannot find any trace of this building in Keene’s description of the fort in his third book on Agra, I presume it must have been utilised since my day. Unless it is the building he

calls the Nobut Khana of Akbar’s palace (26) I have never seen it in any photograph of the place.

² It is not quite clear how much Rhotargur owes its magnificence to Shere Shah

AKBAR, 1556-1605.

It would require a volume to describe all the buildings erected by this remarkable man during his long reign of forty-nine years, and a hundred plates would hardly suffice to make known all their peculiarities. Had Akbar been content to follow in the lines of the style invented by the Pathans and perfected by Shere Shah, it might be easy enough to follow the sequence, but nothing in his character is so remarkable as the spirit of tolerance that pervaded all his acts. He seems to have had as sincere a love and admiration for his Hindu subjects as he had for those of his own faith, and whether from policy or inclination, to have cherished their arts as much as he did those that belonged exclusively to his own people. The consequence is a mixture throughout all his works of two styles, often more picturesque than correct, which might, in the course of another half century, have been blended into a completely new style if persevered in. The spirit of tolerance, however, died with him. There is no trace of Hinduism in the works of Jehangir or Shah Jehan, and Aurungzebe would have been horrified at the suggestion that arts of the infidels could influence anything he did.

One probably of his earliest works was the mausoleum, which he erected over the remains of his father, Humayun, at Delhi. Though it certainly was finished by Akbar, it most probably was designed and commenced by his father; for, as frequently remarked in the previous pages of this work, the great architectural peculiarity of the Tartar or Mongolian races is their tomb-building propensity, in which they are so strongly distinguished from the Aryan, and also from the great Semitic families, with whom they divide the greater part of the habitable globe. Nowhere is this more forcibly illustrated than in India—where the tombs of the Pathans and Moguls form a complete and unbroken series of architectural monuments from the first years of the Moslem invasion to the present hour.

The tombs of the Pathans are less splendid than those of the Moguls; but nevertheless the whole series is singularly interesting, the tombs being far more numerous than the mosques. Generally speaking, also, they are more artistic in design, and frequently not only larger but more splendidly decorated than the buildings exclusively devoted to prayer.

The princes of the Tartar races, in carrying out their love of tombs, made it the practice to build their own in their lifetime, as all people

how much to Akbar; both certainly built there, and on the spot it might easily be ascertained how much belongs to each. Unfortunately, the part that belongs to the British is too easily ascertained. |

“They converted the beautiful Dewan Khand, of which Daniell published a drawing, into a stable for breeding horses.”—Hamilton’s ‘Gazetteer,’ *sub voce*.

must who are really desirous of sepulchral magnificence. In doing this they rejected the Egyptian mode of preparing dark and deep chambers in the heart of the rock, or of the massive pyramid. The Tartars, on the other hand, built their sepulchres of such a character as to serve for places of enjoyment for themselves and their friends during their lifetime, and only when they could enjoy them no longer they became the solemn resting-places of their mortal remains.

The usual process for the erection of these structures is for the king or noble who intends to provide himself a tomb to enclose a garden outside the city walls, generally with high crenellated walls, and with one or more splendid gateways; and in the centre of this he erects a square or octagonal building, crowned by a dome, and in the more splendid examples with smaller and dome-roofed apartments on four of the sides or angles, the other four being devoted to entrances. This building is generally situated on a lofty square terrace, from which radiate four broad alleys, generally with marble-paved canals ornamented with fountains; the angular spaces are planted with cypresses and other evergreens and fruit-trees, making up one of those formal but beautiful gardens so characteristic of the East. During the lifetime of the founder, the central building is called a *Barrah Durrie*, or festal hall, and is used as a place of recreation and feasting by him and his friends.

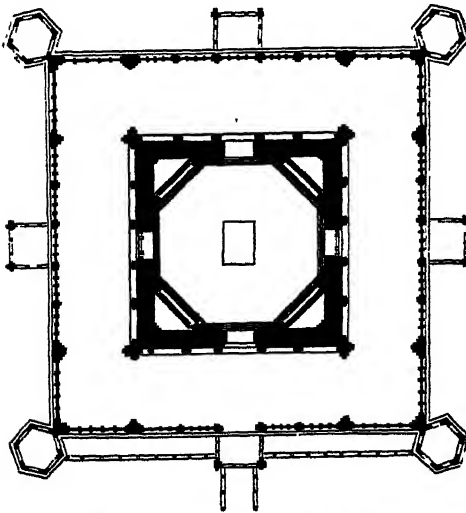
At his death its destination is changed—the founder's remains are interred beneath the central dome. Sometimes his favourite wife lies beside him; but more generally his family and relations are buried beneath the collateral domes. When once used as a place of burial, its vaults never again resound with festive mirth. The care of the building is handed over to priests and cadis, who gain a scanty subsistence by the sale of the fruits of the garden, or the alms of those who come to visit the last resting-place of their friend or master. Perfect silence takes the place of festivity and mirth. The beauty of the surrounding objects combines with the repose of the place to produce an effect as graceful as it is solemn and appropriate.

Though the tombs, with the remains of their enclosures, are so numerous throughout all India, the *Taje Mehal*, at Agra, is almost the only tomb that retains its garden in anything like its pristine beauty, and there is not perhaps in the whole world a scene where nature and art so successfully combine to produce a perfect work of art as within the precincts of this far-famed mausoleum.

The tomb of *Humayun Shah*, the first of the Moguls who was buried in India, still stands tolerably entire among the ruins of Old Delhi, of which indeed it forms the principal and most striking object. It stands well on a lofty square platform, adorned with arches, whose piers are ornamented with an inlay of white marble. The tomb itself is an octagonal apartment, of considerable dimensions, crowned by a

dome of white marble, of very graceful contour externally. Four sides of the octagon are occupied by the entrances; to the other four smaller octagonal apartments are attached, making up a building nearly a square in plan, with only the angles slightly cut away.¹ Its plan is in fact that afterwards adopted at the Taje (Woodcut No. 338), but used here without the depth and poetry of that celebrated building. Its most marked characteristic, however, is its purity—it might almost be called poverty—of design. It is so very unlike anything else that Akbar ever built, that it is hardly possible it could have been designed by him. It has not even the picturesque boldness of the earlier Pathan tombs, and in fact looks more like buildings a century at least more modern than it really is. It is, however, a noble tomb, and anywhere else must be considered a wonder.

Humayun's tomb, however, is so well known from drawings and photographs, that, in order to illustrate the architecture of the day, it may be preferable to take the contemporary tomb of Mohammad Ghaus at Gualior, which certainly was erected during the early part of



327. Plan of Tomb of Mohammad Ghaus, Gualior.
Scale 50 ft. to 1 in.

Akbar's reign, and is a singularly interesting example of the tombs of the period. It is a square, measuring 100 ft. each way, exclusive of the hexagonal towers, which are attached to the angles (Woodcut No. 327). The chamber of the tomb itself is a hall 43 ft. square, with the angles cut off by pointed arches so as to form an octagon, on which the dome rests. Around this square building is a gallery, 20 ft. wide between the piers, enclosed on all sides by

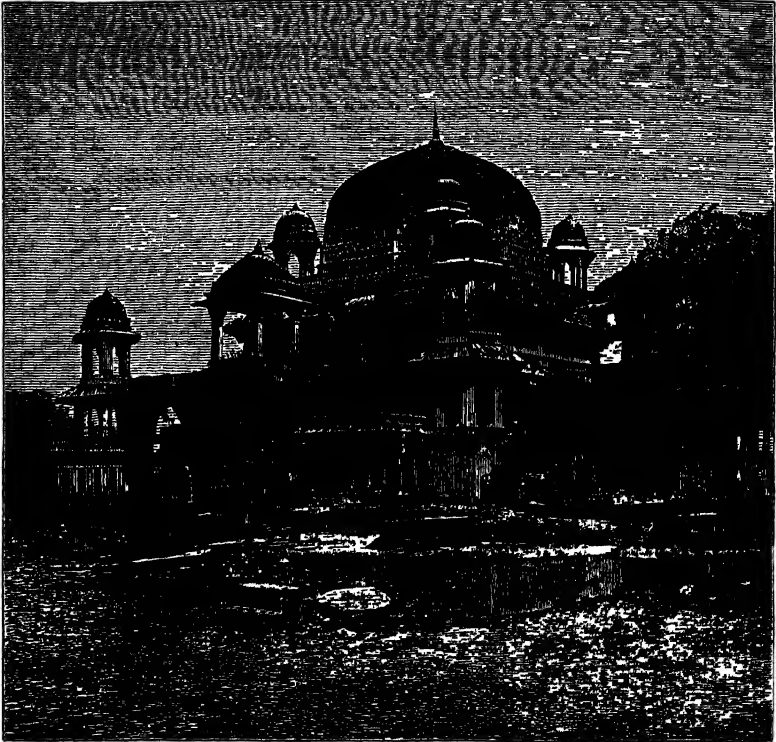
a screen of the most exquisite tracery in pierced stone-work with a projecting porch on each face (Woodcut No. 328).²

¹ I have mislaid the measurements and plan I made of this building; and, as neither Gen. Cunningham nor his assistants give either plan or dimensions,

I am unable to quote any figures in the text.

² The plan is taken from one by Gen. Cunningham ('Reports,' vol. ii., plate

On comparing this with the tomb of Shere Shah at Sasseram, which in many respects it resembles to a considerable extent, it will be seen that it marks a considerable progress in tomb-building during even the short period that elapsed between the erection of the two. There is an inherent weakness in an octagonal form as compared with the square, that even the Pathans never quite successfully conquered ; and the outward screen of trellis-work is far more elegant than the open arcade of the Sasseram tomb. Something may be due to the fact



328.

Tomb of Mohammad Ghans, Gualior. (From a Photograph.)

that Gualior was a city where building of an ornamental character had long been going on, and where consequently a superior school of masons and architects may always have existed, while Sasseram was a remote country village, where these advantages were unknown. But be this as it may, the progress is such in so short a time, that we can only ascribe it to the invigorating touch of Akbar's genius, which was afterwards to work such wonders.

91). He omits, however, these square projections. I have added them from the photographs.

One of the most remarkable and characteristic of Akbar's buildings is the old or Red Palace in the fort, so called from being constructed entirely of red sandstone, unfortunately not a very good quality, and consequently much of its ornament has peeled off. It is a square building, measuring 249 ft. by 260 ft. In the centre is a courtyard, 71 ft. by 72 ft., on either side of which are two halls facing one another. The largest, 62 ft. by 37 ft., has a flat ceiling of stone, divided into panels, and supported by struts of purely Hindu design, very similar to those used in the palaces of Mān Sing and Vicramaditya at Gualior. Every feature around this court is indeed of pure Hindu architecture. No arches appear anywhere, but the horizontal style of construction everywhere. The ornamentation, too, which is carved on all the flat surfaces, is of a class used by Akbar, but not found in the buildings of others. Indeed, throughout this palace arches are used so sparingly, and Hindu forms and Hindu construction prevail to such an extent, that it would hardly be out of place at Chittore or Gualior, though it still bears that impress of vigour and originality that he and he only knew how to impress on all his works.¹

It is, however, at Fūttehpore Sikri that Akbar must be judged of as a builder. During the whole of his reign it was his favourite residence. He apparently was the first to occupy the spot, and apparently the last, at least, to build there, no single building being identified as having been erected by any of his successors.

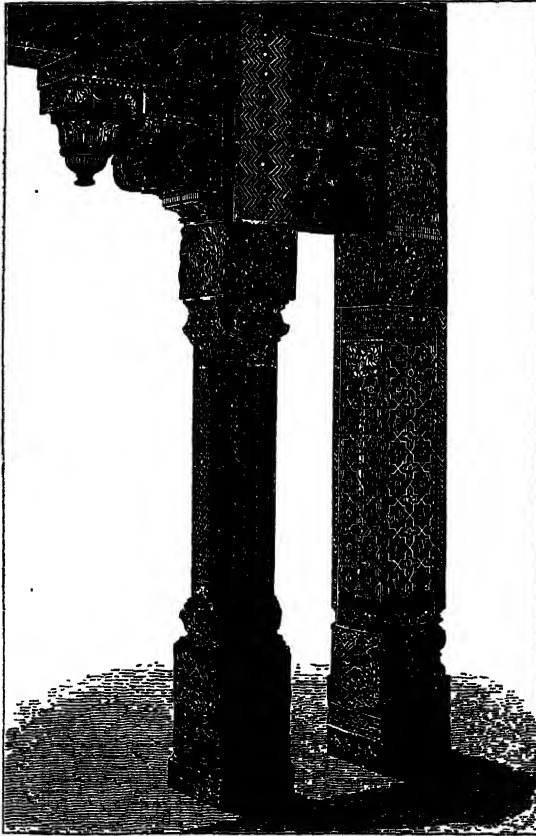
Akbar seems to have had no settled plan when he commenced building there. The original part of the building seems to be the Khas Mehal, a square block of building measuring about 260 ft. each way, and therefore of about the same dimensions as the Red Palace in the fort at Agra. Its courtyard, however, is larger, about 170 ft. each way, and the buildings that surround it very inferior in richness of design and ornamentation. This, however, is far more than compensated for by the courts and pavilions that he added from time to time. There is the Dewanni Khas, or throne-room, a square building with a throne consisting of an enormous flower-like bracket, supported on a richly-carved pillar;² a peristylar building, called his office, very similar to one he erected at Allahabad, to be mentioned hereafter; a five-storeyed open pavilion, all the pillars of which are most richly carved, and long colonnades and walls connecting these with one another. The richest, the most beautiful,

¹ An attempt has lately been made by Gen. Cunningham and his assistants ('Reports,' vol. iv. p. 124), to ascribe this palace to Jehangir. On what authority is not stated; but unless it is very clear and distinct I must decline to admit it.

The whole evidence, so far as I can judge, is directly opposed to such an hypothesis. There is a plan of this palace, in his 'Reports,' vol. iv., plate 8.

² A cast of this throne is in the South Kensington Museum.

as well as the most characteristic of all his buildings here are three small pavilions, said to have been erected to please and accommodate his three favourite sultanas : hence called Bîr Bul ka Beti ka Mehal, for his Hindu wife, the daughter of his favourite minister, Bîr Bul ; Miriam's House, appropriated to his Christian consort ; and the palace of the Roumi Sultana. They are small, but it is impossible to conceive anything so picturesque in outline, or

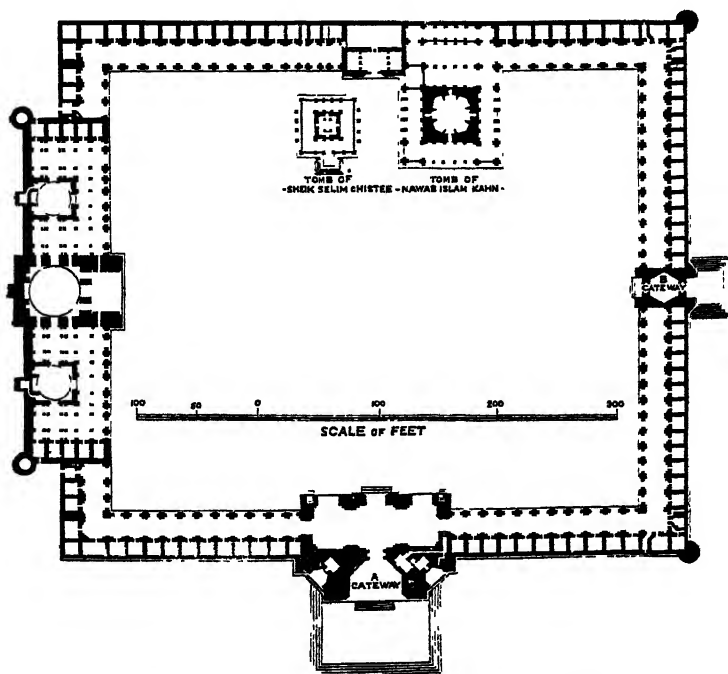


329. Carved Pillars in the Sultana's Kiosk, Futtehpore Sikri. (From a Photograph.)

any building carved and ornamented to such an extent, without the smallest approach to being overdone or in bad taste. The two pillars shown in the annexed woodcut, are from a cast from the last-named pavilion, which is now in the South Kensington Museum. It is, perhaps, the most elaborate of the three ; but the other two are generally in better taste.

The glory, however, of Futtehpore Sikri is its mosque, which is

hardly surpassed by any in India (Woodcut No. 330). It measures 550 ft. east and west, by 470 ft. north and south over all. The mosque itself, 290 ft. by 80 ft., is crowned by three domes. In its courtyard, which measures 350 ft. by 440 ft., stand two tombs: that of Selim Chisti, wholly in white marble, and the windows with pierced tracery of the most exquisite geometrical patterns—flowing tracery is a subsequent invention. It possesses besides a deep cornice of marble supported by brackets of the most elaborate design, so much so indeed as to be almost fantastic—the only approach to bad taste

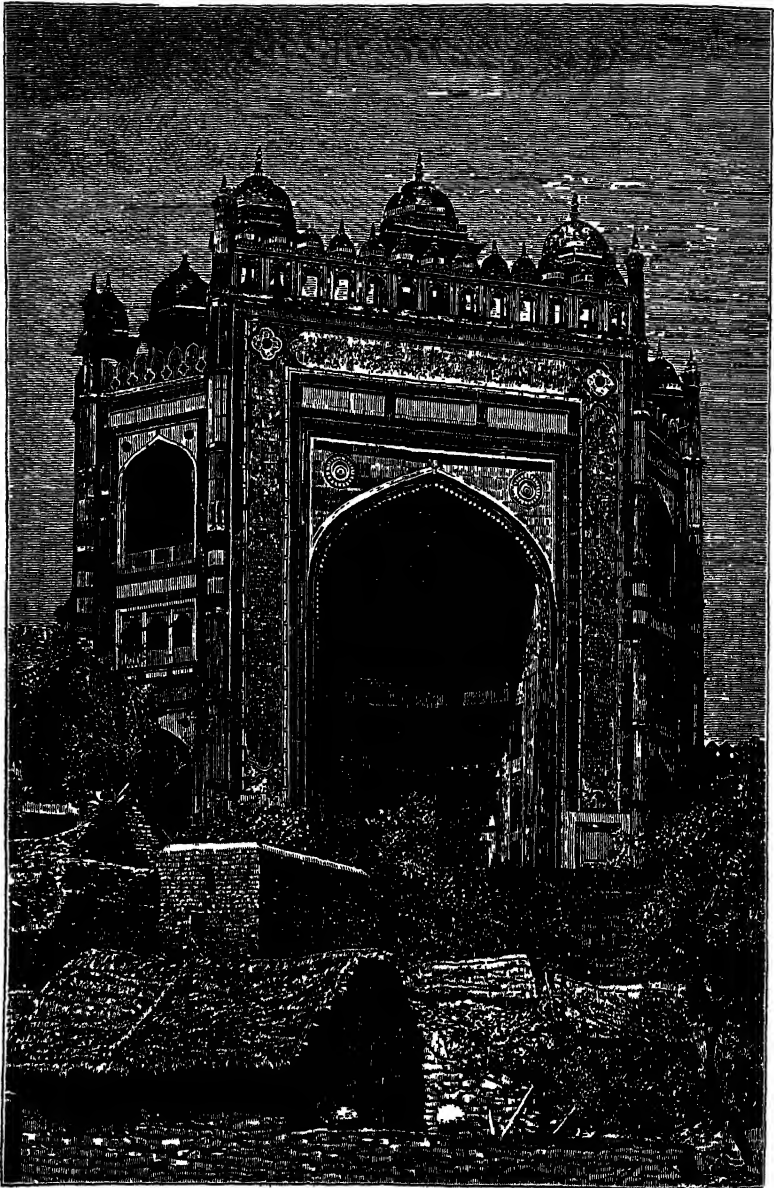


330

Mosque at Futehpore Sikri. (From a Plan by Lieut. Cole, R.E.)

in the place; the other tomb, that of Islam Khan, is soberer and in excellent taste, but quite eclipsed by its surroundings. Even these parts, however, are surpassed in magnificence by the southern gateway, measuring 130 ft. by 85 ft. in plan, and of proportionate dimensions in height (Woodcut No. 331). As it stands on a rising ground, when looked at from below, its appearance is noble beyond that of any portal attached to any mosque in India, perhaps in the whole world. This gateway may also be quoted as a perfectly satisfactory solution of a problem which has exercised the ingenuity of architects in all ages, but was more successfully treated by the Saracenic architects than by any others.

It was always manifest that to give a large building a door at all in proportion to its dimensions was, to say the least of it, very



331.

Southern Gateway of Mosque, Futtahpore Sikri. (From a Photograph.)

inconvenient. Men are only 6 ft. high, and they do not want portals through which elephants might march. The Greeks never ventured,

however, to reduce the proportionate size of their portals, though it may be they only opened the lower half, and they covered them, in almost all instances, with porticos to give them a dignity that even their dimensions failed to impart.

The Gothic architects tried, by splaying their deeply-embowed doorways, and by ornamenting them richly with carving and sculpture, to give them the dignity that was indispensable for their situation without unnecessarily increasing the size of the openings. It was left, however, for the Saracenic architects completely to get over the difficulty. They placed their portals—one, or three, or five, of very moderate dimensions—at the back of a semi-dome. This last feature thus became the porch or portico, and its dimensions became those of the portal, wholly irrespective of the size of the opening. No one, for instance, looking at this gateway can mistake that it is a doorway and that only, and no one thinks of the size of the openings which are provided at its base. The semi-dome is the modulus of the design, and its scale that by which the imagination measures its magnificence.

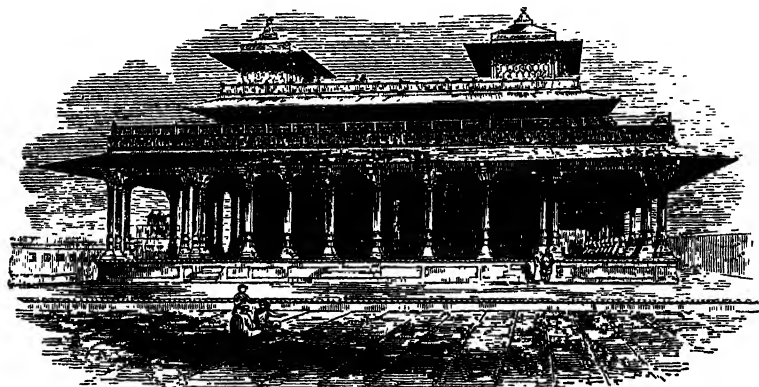
The same system pervades almost all the portals of the age and style, and always with a perfectly satisfactory result—sometimes even more satisfactory than in this instance, though it may be in less proportionate dimensions. The principle seems the best that has yet been hit upon, and, when that is right, failure is as difficult, as it is to achieve success when the principle of the design is wrong.

Taking it altogether, this palace at Futtehpore Sikri is a romance in stone, such as few—very few—are to be found anywhere; and it is a reflex of the mind of the great man who built it more distinct than can easily be obtained from any other source.¹

Allahabad was a more favourite residence of this monarch than Agra, perhaps as much so as even Futtehpore Sikri; but the English having appropriated the fort, its glories have been nearly obliterated. The most beautiful thing was the pavilion of the Chahls Sitûn, or forty pillars, so called from its having that number on the principal floor, disposed in two concentric octagonal ranges, one internal of sixteen pillars, the other outside of twenty-four. Above this, supported by the inner colonnade, was an upper range of the same number of pillars crowned by a dome. This building has entirely disappeared, its materials being wanted to repair the fortifications. The great hall, however, still remains, represented in the annexed woodcut (No. 332). It is now the arsenal; a brick wall has been run up

¹ Photographs of this palace are now common, and can be obtained anywhere; and recently Lient. Cole's 'Report on Buildings in the Neighbourhood of Agra' supplies some very interesting new ones with plans, from which the dimensions in the text are quoted.

between its outer colonnades with windows of English architecture, and its curious pavilions and other accompaniments removed; and internally, whatever could not be conveniently cut away is carefully covered up with plaster and whitewash, and hid by stands of arms



333.

Hall in Palace at Allahabad. (From a Drawing by Daniell.)

and deal fittings. Still its plan can be made out; a square hall supported by eight rows of columns, eight in each row, thus making in all sixty-four, surrounded by a deep verandah of double columns, with groups of four at the angles, all surmounted by bracket capitals of the most elegant and richest design, and altogether as fine in style and as rich in ornament as anything in India.

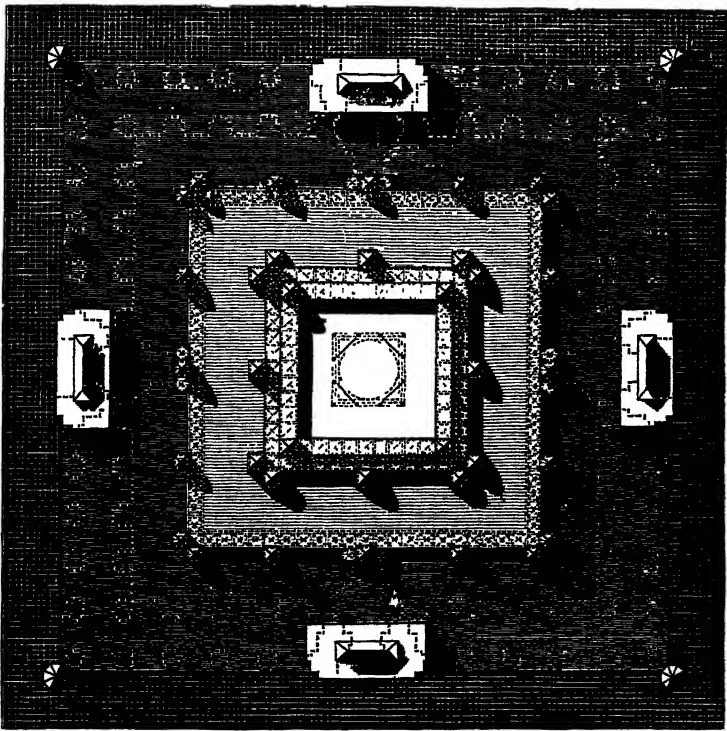
Perhaps, however, the most characteristic of Akbar's buildings is the tomb he commenced to erect for himself at Secundra, near Agra, which is quite unlike any other tomb built in India either before or since, and of a design borrowed, as I believe, from a Hindu, or more correctly, Buddhist, model. It stands in an extensive garden, still kept up, approached by one noble gateway. In the centre of this garden, on a raised platform, stands the tomb itself, of a pyramidal form. The lower storey measures 320 ft. each way, exclusive of the angle towers. It is 30 ft. in height, and pierced by ten great arches on each face, and with a larger entrance adorned with a mosaic of marble in the centre (Woodcuts Nos. 333, 334).¹

On this terrace stands another far more ornate, measuring 186 ft. on each side, and 14 ft. 9 in. in height. A third and fourth, of similar design, and respectively 15 ft. 2 in. and 14 ft. 6 in. high, stand on

¹ No plan or section of this tomb has ever, so far as I know, been published, though it has been in our possession for nearly a century. Those here given are from my own measurements, and, though

they may be correct as far as they go, are not so detailed as those of such a monument ought to be, and would have been, had it been in the hands of any other European nation.

this, all these being of red sandstone. Within and above the last is a white marble enclosure 157 ft. each way, or externally just half the length of the lowest terrace, its outer wall entirely composed of marble trellis-work of the most beautiful patterns. Inside it is surrounded by a colonnade or cloister of the same material, in the centre of which, on a raised platform, is the tombstone of the founder, a splendid piece of the most beautiful arabesque tracery. This, however, is not the true burial-place; but the mortal remains of this great king repose under a far plainer tombstone in a vaulted chamber in

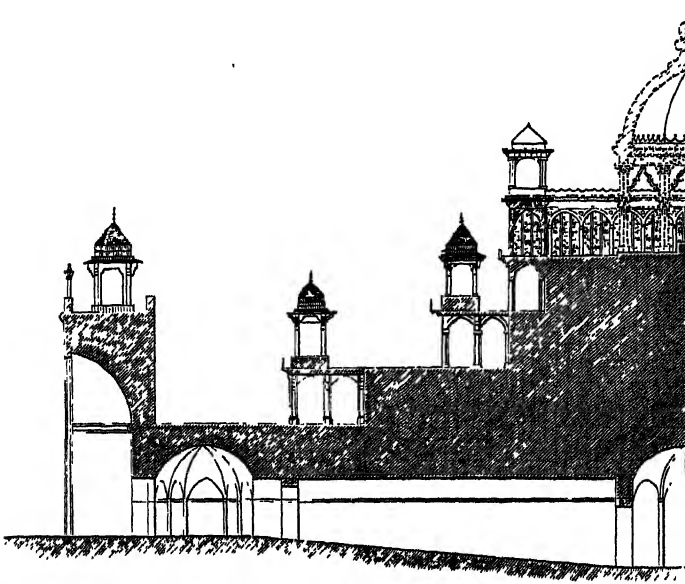


333. Plan of Akbar's Tomb at Secundra. (From a Plan by the Author.) Scale 100 ft. to 1 in.

the basement 35 ft. square, exactly under the simulated tomb that adorns the summit of the mausoleum.

At first sight it might appear that the design of this curious and exceptional tomb was either a caprice of the monarch who built it, or an importation from abroad (Woodcut No. 335). My impression, on the contrary, is, that it is a direct imitation of some such building as the old Buddhist viharas which may have existed, applied to other purposes in Akbar's time. Turning back, for instance, to Woodcuts Nos. 66 and 181, representing the great rath at Mahavellipore, it will

be seen that the number and proportion of the storeys is the same. The pavilions that adorn the upper storeys of Akbar's tomb appear distinct reminiscences of the cells that stand on the edge of each platform of the rock-cut example. If the tomb had been crowned by a domical chamber over the tombstone, the likeness would have been so great that no one could mistake it, and my conviction is, that such a chamber was part of the original design. No such royal tomb remains exposed to the air in any Indian mausoleum; and the raised platform in the centre of the upper cloister, 38 ft. square, looks so like its foundation that I cannot help believing it was intended for that purpose. As the monument now stands, the pyramid has



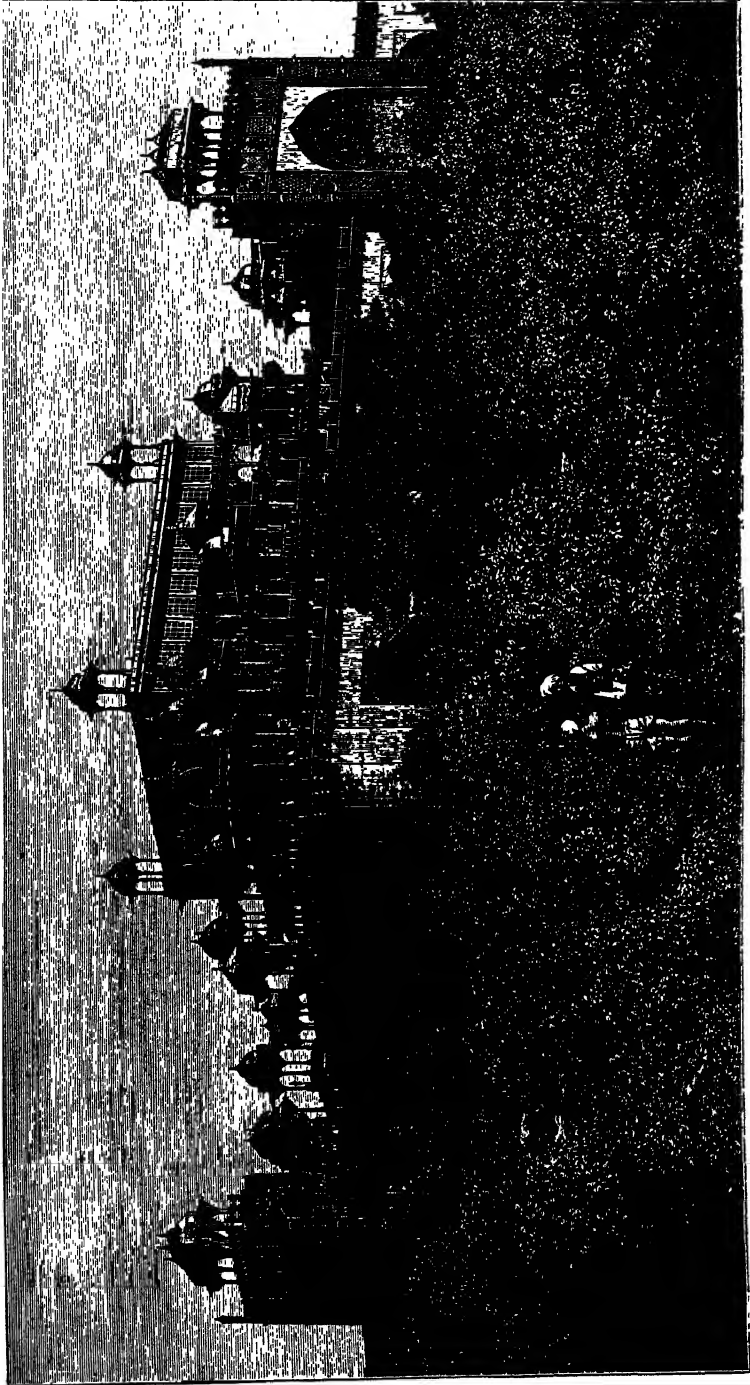
334. Diagram Section 1 of one-half of Akbar's Tomb at Secundra, explanatory of its Arrangements.
Scale 50 ft. to 1 in.

a truncated and unmeaning aspect. The total height of the building now is a little more than 100 ft. to the top of the angle pavilions; and a central dome 30 or 40 ft. higher, which is the proportion that the base gives, seems just what is wanted to make this tomb as beautiful in outline and in proportion as it is in detail. Had it been so completed, it certainly would have ranked next the Taje among Indian mausolea.²

¹ The diagram is probably sufficient to explain the text, but must not be taken as pretending to be a correct architectural drawing. There were parts, such as the height of the lower dome and upper

angle kiosks, I had no means of measuring, and after all, I was merely making memoranda for my own satisfaction.

² After the above was written, and the diagram drawn (Woodcut No. 334), I was



View of Akbar's Tomb, Secundera. (From a Photograph.)

JEHANGIR, A.D. 1605-1628.

When we consider how much was done by his father and his son, it is rather startling to find how little Jehangir contributed to the architectural magnificence of India. Partly this may be owing to his not having the same passion for building which characterised these two great monarchs; but partly also to his having made Lahore the capital during his reign, and to his having generally resided there in preference to Agra or Delhi. The great mosque there, however, which was built by him, seems to be equal in magnificence to that built by Shah Jehan at Delhi. This mosque, however, seems to have been surpassed by one erected in the city of Lahore by his vizir. It is in the Persian style, covered with enamelled tiles, and resplendent in colours, but not very graceful in form. His tomb, in which he lies buried with his queen, the imperious Nurjehan, was worthy of its builder, but has been used as a quarry by the Sikhs, and half the splendour of the temple at Amritsir is due to marbles plundered from this mausoleum. The palace, too, which he erected, was worthy of his other buildings, but it has suffered as much as the rest. It has been used as a habitation from that time to this, and so altered, to adapt it to the wants of its successive occupants, that little of its original form remains.

We have, however, no measurements and no information about these monuments which would enable us to speak with any confidence either regarding them, or the other buildings of that city, which seems to owe its principal splendour to the reign of this monarch.

At the other end of his dominions also he built a splendid new capital at Dacca, in supersession to Gaur, and adorned it with several buildings of considerable dimensions. These, however, were principally in brick-work, covered with stucco, and with only pillars and brackets in stone. Most of them, consequently, are in a state of ruinous decay; marvellously picturesque, it must be confessed, peering through the luxuriant vegetation that is tearing them to pieces, but hardly worthy to be placed in competition with the stone and marble buildings of the more northern capitals.

There is one building—the tomb known as that of Eti-mad-

not a little pleased to find the following entry in Mr. Finch's journal. He resided in Agra for some years, and visited the tomb for the last time apparently in 1609, and after describing most faithfully all its peculiarities up to the upper floor, as it now stands, adds: "At my last sight thereof there was only overhead a rich tent with a Semaine over the tomb. But it is to be *inarched* over with the most curious white and speckled marble, and to be sealed all within with pure sheet gold richly inwrought."—'Purchas, his Pilgrims,' vol. i. p. 440.

Doulah—at Agra, however, which certainly belongs to this reign, and, though not erected by the monarch himself, cannot be passed over, not only from its own beauty of design, but also because it marks an epoch in the style to which it belongs. It is situated on the left bank of the river, in the midst of a garden surrounded by a wall measuring 540 ft. on each side. In the centre of this, on a raised platform, stands the tomb itself, a square measuring 69 ft. on each side. It is two storeys in height, and at each angle is an octagonal tower, surmounted by an open pavilion. The towers, however, are rather squat in proportion, and the general design of the building very far from being so pleasing as that of many less pretentious tombs in the neighbourhood. Had it, indeed, been built in red sandstone, or even with an inlay of white marble like that of Humayun, it would not have attracted much attention. Its real merit consists in being wholly in white marble, and being covered throughout with a mosaic in “pietro duro”—the first, apparently, and certainly one of the most splendid, examples of that class of ornamentation in India.

It seems now to be ascertained that in the early part of the 17th century Italian artists, principally, apparently from Florence, were introduced into India, and taught the Indians the art of inlaying marble with precious stones.¹ No instance of this mode of decoration occurs, so far as I know, in the reign of Akbar; but in that of Shah

¹ Although the fact seems hardly now to be doubted, no very direct evidence has yet been adduced to prove that it was to foreign—Florentine—artists that the Indians owe the art of inlaying in precious stones generally known as work in “pietro duro.” Austin or Augustin de Bordeaux, is the only European artist whose name can positively be identified with any works of the class. He certainly was employed by Shah Jehan at Delhi, and executed that mosaic of Orpheus or Apollo playing to the beasts, after Raphael’s picture, which once adorned the throne there, and is now in the Indian Museum at South Kensington.

It is, however, hardly to be expected that natives should record the names of those who surpassed them in their own arts; and needy Italian adventurers were even less likely to have an opportunity of recording the works they executed in a strange and foreign country. Had any Italian who lived at the courts of Jehangir or Shah Jehan written a book, he might

have recorded the artistic prowess of his countrymen, but none such, so far as I am aware, has yet seen light.

The internal evidence, however, seems complete. Up to the erection of the gates to Akbar’s tomb at Secundra in the first ten years of Jehangir’s reign, A.D. 1605–1615, we have infinite mosaics of coloured marble, but no specimen of “inlay.” In Eti-mad-Doulah’s tomb, A.D. 1615–1628, we have both systems in great perfection. In the Taje and palaces at Agra and Delhi, built by Shah Jehan, A.D. 1628–1668, the mosaic has disappeared, being entirely supplanted by the “inlay.” It was just before that time that the system of inlaying called “pietro duro” was invented, and became the rage at Florence and, in fact, all throughout Europe; and we know that during the reign of the two last-named monarchs many Italian artists were in their service quite capable of giving instruction in the new art.

Jehan it became the leading characteristic of the style, and both his palaces and his tombs owe their principal distinction to the beauty of the mode in which this new invention was employed.

It has been doubted whether this new art was really a foreign introduction, or whether it had not been invented by the natives of India themselves. The question never, probably, would have arisen had one of the fundamental principles of architecture been better understood. When we, for instance, having no art of our own, copy a Grecian or Roman pillar, or an Italian mediæval arch in detail, we do so literally, without any attempt to adapt it to our uses or climate; but when a people having a style of their own wish to adopt any feature or process belonging to any other style, they do not copy but adapt it to their uses: and it is this distinction between adopting and adapting that makes all the difference. We would have allowed the Italians to introduce with their mosaics all the details of their Cinque-cento architecture. The Indians set them to reproduce, with their new materials and processes, the patterns which the architects of Akbar had been in the habit of carving in stone or of inlaying in marble. Every form was adapted to the place where it was to be used. The style remained the same, so did all the details; the materials only were changed, and the patterns only so far as was necessary to adapt them to the smaller and more refined materials that were to be used.¹

As one of the first, the tomb of Eti-mad-Doulah was certainly one of the least successful specimens of its class. The patterns do not quite fit the places where they are put, and the spaces are not always those best suited for this style of decoration. Altogether I cannot help fancying that the Italians had more to do with the design of this building than was at all desirable, and they are to blame for its want of grace. But, on the other hand, the beautiful tracery of the pierced marble slabs of its windows, which resemble those of Selim Chisti's tomb at Futtehpoore Sikri, the beauty of its white marble walls, and the rich colour of its decorations, make up so beautiful a whole, that it is only on comparing it with the works of Shah Jehan that we are justified in finding fault.

SHAH JEHAN, A.D. 1628-1658.

It would be difficult to point out in the whole history of architecture any change so sudden as that which took place between the style of Akbar and that of his grandson Shah Jehan—nor any

¹ Something of the same sort occurred when the Turks occupied Constantinople. They adapted the architecture of the Christians to their own purposes, but without copying. *Vide ante*, vol. ii. p. 528, *et seqq.*

contrast so great as that between the manly vigour and exuberant originality of the first, as compared with the extreme but almost effeminate elegance of the second. Certainly when the same people, following the same religion, built temples and palaces in the same locality, nothing of the sort ever occurred in any country whose history is now known to us.

Nowhere is the contrast between the two styles more strongly marked than in the palace of Agra—from the red stone palace of Akbar, with its rich sculptures and square Hindu construction, a door opens into the white marble court of the harem of Shah Jehan, with all its feeble prettiness, but at the same time marked with that peculiar elegance which is found only in the East. The court is not large, 170 ft. by 235 ft., but the whole is finished with the most elaborate care. Three sides of this are occupied by the residences of the ladies, not remarkable for size, nor, in their present state, for architectural beauty; but the fourth, overhanging the river, is occupied by three white marble pavilions of singular elegance, though it is not easy now to see them, some English officer having pitched upon the principal one as a residence, and having in consequence covered the polished marble and elegant arabesques of flowers inlaid in precious stones with thick coatings of that whitewash which was indispensable to his idea of comfort and elegant simplicity.

As in most Moorish palaces, the baths on one side of this court were the most elegant and elaborately decorated apartments in the palace. The baths have been destroyed, but the walls and roofs still show the elegance with which they were adorned.¹

Behind this, in the centre of the palace, is a great court, 500 ft. by 370 ft. surrounded by arcades, and approached at the opposite ends through a succession of beautiful courts opening into one another by gateways of great magnificence. One side of this court is the great hall of the palace—the Dewanni Aum—208 ft. by 76 ft., supported by three ranges of arcades of exquisite beauty. It is open on three sides, and with a niche for the throne at the back. This, like the hall at Allahabad, is now an arsenal, and reduced to as near a similarity as possible to those in our dockyards.² Behind it are two smaller courts, the one containing the Dewanni Khas, or private hall

¹ The great bath was torn up by the Marquis of Hastings with the intention of presenting it to George IV., an intention apparently never carried out; but it is difficult to ascertain the facts now, as the whole of the marble flooring with what remained of the bath was sold by auction by Lord William Bontinck, and fetched probably 1 per cent. of its original cost; but it helped to eke out the

revenues of India in a manner most congenial to the spirit of its governors.

² Since the appointment of Sir John Strachey, the present enlightened Governor of the North West Provinces, I understand that this state of affairs is entirely altered. Both care and money are now expended liberally for the protection and maintenance of such old buildings that remain in the province.

of audience, the other the hareem. The hall in the former is one of the most elegant of Shah Jehan's buildings, being wholly of white marble inlaid with precious stones, and the design of the whole being in the best style of his reign.

One of the most picturesque features about this palace is a marble pavilion, in two storeys, that surmounts one of the circular bastions on the river face, between the hareem and the Dewanni Khas. It looks of an earlier style than that of Shah Jehan, and if Jehangir built anything here it is this. On a smaller scale, it occupies the same place here that the Chalis Sirin did in the palace at Allahabad; and exemplifies, even more than in their larger buildings, the extreme elegance and refinement of those who designed these palaces.¹

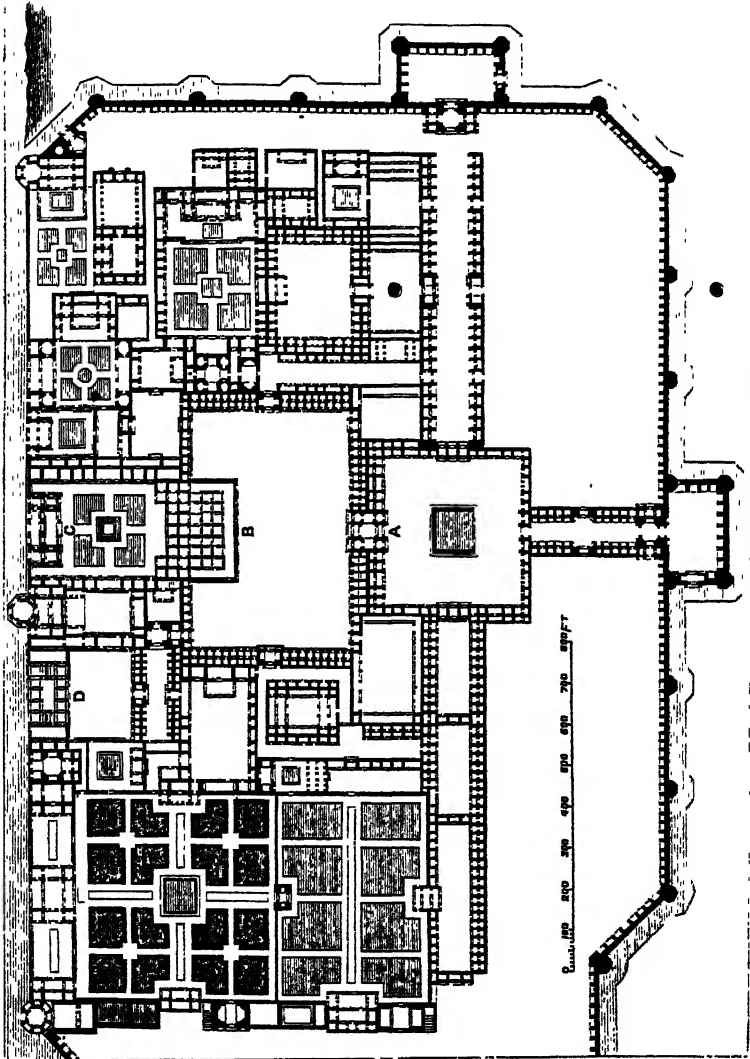
PALACE AT DELHI.

Though the palace at Agra is perhaps more picturesque, and historically certainly more interesting, than that of Delhi, the latter had the immense advantage of being built at once, on one uniform plan, and by the most magnificent, as a builder, of all the sovereigns of India. It had, however, one little disadvantage, in being somewhat later than Agra. All Shah Jehan's buildings there, seem to have been finished before he commenced the erection of the new city of Shah Jehanabad with its palace, and what he built at Agra is soberer, and in somewhat better taste than at Delhi. Notwithstanding these defects, the palace at Delhi is, or rather was, the most magnificent palace in the East—perhaps in the world—and the only one, at least in India, which enables us to understand what the arrangements of a complete palace were when deliberately undertaken and carried out on one uniform plan (Woodcut No. 336).

The palace at Delhi, which is situated like that at Agra close to the edge of the Jumna, is a nearly regular parallelogram, with the angles slightly canted off, and measures 1600 ft. east and west, by 3200 ft. north and south, exclusive of the gateways. It is surrounded on all sides by a very noble wall of red sandstone, relieved at intervals by towers surmounted by kiosks. The principal entrance faces the Chandni Chowk, a noble wide street, nearly a mile long, planted with two rows of trees, and with a stream of water running down its centre. Entering within its deeply-recessed portal, you find yourself

¹ Perfect plans of this palace exist in the War Department of India. It is a great pity the Government cannot afford the very few rupees it would require to lithograph and publish them. Without such plans it is very difficult to make any description intelligible. That in Keene's 'Handbook of Agra,' though useful as far as it goes, is on too small a scale and not sufficiently detailed for purposes of architectural illustration.

beneath the vaulted hall, the sides of which are in two storeys, and with an octagonal break in the centre. This hall, which is 375 ft. in length over all, has very much the effect of the nave of a gigantic Gothic cathedral, and forms the noblest entrance known to belong to



Palace at Delhi. (From a native Plan in the possession of the Author.)

any existing palace. At its inner end this hall opened into a courtyard, 350 ft. square, from the centre of which a noble bazaar extended right and left, like the hall, two storeys in height, but not vaulted. One of these led to the Delhi gate, the other, which I believe was never quite finished, to the garden. In front, at the entrance, was the

Nolbat Khana (A), or music hall, beneath which the visitor entered the second or great court of the palace, measuring 550 ft. north and south, by 385 ft. east and west. In the centre of this stood the Dewanni Ann (B), or great audience hall of the palace, very similar in design to that at Agra, but more magnificent. Its dimensions are, as nearly as I can ascertain, 200 ft. by 100 ft. over all. In its centre is a highly ornamental niche, in which, on a platform of marble richly inlaid with precious stones,¹ and directly facing the entrance, once stood the celebrated peacock throne, the most gorgeous example of its class that perhaps even the East could ever boast of. Behind this again was a garden-court; on its eastern side was the Rung Mehal (C), or painted hall, containing a bath and other apartments.

This range of buildings, extending 1600 ft. east and west, divided the palace into two nearly equal halves. In the northern division of it were a series of small courts, surrounded by buildings apparently appropriated to the use of distinguished guests; and in one of them overhanging the river stood the celebrated Dewanni Khas (D), or private audience hall—if not the most beautiful, certainly the most highly ornamented of all Shah Jehan's buildings. It is larger certainly, and far richer in ornament than that at Agra, though hardly so elegant in design; but nothing can exceed the beauty of the inlay of precious stones with which it is adorned, or the general poetry of the design. It is round the roof of this hall that the famous inscription runs: "If there is a heaven on earth it is this, it is this," which may safely be rendered into the sober English assertion, that no palace now existing in the world possesses an apartment of such singular elegance as this.

Beyond this to the northward were the gardens of the palace, laid out in the usual formal style of the East, but adorned with fountains and little pavilions and kiosks of white marble, that render these so beautiful and so appropriate to such a climate.

The whole of the area between the central range of buildings to the south, and eastward from the bazaar, measuring about 1000 ft.

¹ When we took possession of the palace every one seems to have looted after the most independent fashion. Among others, a Captain (afterwards Sir John) Jones tore up a great part of this platform, but had the happy idea to get his loot set in marble as table tops. Two of these he brought home and sold to the Government for £500, and they are now in the India Museum. No one can doubt that the one with the birds was executed by Florentine, or at least Italian artists; while the other,

which was apparently at the back of the platform, is a bad copy from Raphael's picture of Orpheus charming the beasts. As is well known, that again was a copy of a picture in the Catacombs. There Orpheus is playing on a lyre, in Raphael's picture on a violin, and that is the instrument represented in the Delhi mosaic. Even if other evidence were wanting, this would be sufficient to set the question at rest. It certainly was not put there by the bigot Aurungzebe, nor by any of his successors.

each way, was occupied by the harem and private apartments of the palace, covering, consequently, more than twice the area of the Escorial, or, in fact, of any palace in Europe. According to the native plan I possess, which I see no reason for distrusting, it contained three garden courts, and some thirteen or fourteen other courts, arranged some for state, some for convenience; but what they were like we have no means of knowing. Not one vestige of them now remains. Judging from the corresponding parts of the palace at Agra, built by the same monarch, they must have vied with the public apartments in richness and in beauty when originally erected, but having continued to be used as an abode down to the time of the mutiny, they were probably very much disfigured and debased. Taste was, no doubt, at as low an ebb inside the walls of the palace during the last hundred years as it was outside, or as we find it at Lucknow and elsewhere; but all the essential parts of the structure were there, and could easily have been disencumbered from the accretions that had been heaped upon it. The idea, however, of doing this was far from entering into the heads of our governors. The whole of the harem courts of the palace were swept off the face of the earth to make way for a hideous British barrack, without those who carried out this fearful piece of Vandalism thinking it even worth while to make a plan of what they were destroying, or preserving any record of the most splendid palace in the world.

Of the public parts of the palace all that now remains is the entrance hall, the Nobut Khana, the Dewanni Aum and Khas, and the Rung Mehal—now used as a mess-room—and one or two small pavilions. They are the gems of the palace, it is true, but without the courts and corridors connecting them they lose all their meaning and more than half their beauty.¹ Being now situated in the middle of a British barrack-yard, they look like precious stones torn from their settings in some exquisite piece of Oriental jeweller's work and set at random in a bed of the commonest plaster.²

¹ It ought in fairness to be added that, since they have been in our possession, considerable sums have been expended on the repair of these fragments.

² The excuse for this deliberate act of Vandalism was, of course, the military one, that it was necessary to place the garrison of Delhi in security in the event of any sudden emergency. Had it been correct it would have been a valid one, but this is not the case. Without touching a single building of Shah Jehan's there was ample space within the walls for all the stores and matériel of the garrison of Delhi, and in the palace and Selim Ghur

ample space for a garrison, more than doubly ample to man their walls in the event of an émeute. There was ample space for larger and better ventilated barracks just outside the palace walls, where the Sepoy lines now are, for the rest of the garrison, who could easily have gained the shelter of the palace walls in the event of any sudden rising of the citizens. It is, however, ridiculous to fancy that the diminished and unarmed population of the city could ever dream of such an attempt, while any foreign enemy with artillery strong enough to force the bastioned enceinte that sur-

TAJE MEHAL.

It is a pleasure to turn from this destroyed and desecrated palace to the Taje Mehal, which even more, perhaps, than the palace was always the chief-oeuvre of Shah Jehan's reign (Woodcut No. 337). It, too, has been fortunate in attracting the attention of the English, who have paid sedulous attention to it for some time past, and keep it now, with its gardens, in a perfect state of substantial repair.

No building in India has been so often drawn and photographed as this, or more frequently described; but, with all this, it is almost impossible to convey an idea of it to those who have not seen it, not only because of its extreme delicacy, and beauty of material employed in its construction, but from the complexity of its design. If the Taje were only the tomb itself, it might be described, but the platform on which it stands, with its tall minarets, is a work of art in itself. Beyond this are the two wings, one of which is a mosque, which anywhere else would be considered an important building. This group of buildings forms one side of a garden court 880 ft. square: and beyond this again an outer court, of the same width but only half the depth. This is entered by three gateways of its own, and contains in the centre of its inner wall the great gateway of the garden court, a worthy pendant to the Taje itself.¹ Beautiful as it is in itself, the Taje would lose half its charm if it stood alone. It is the combination of so many beauties, and the perfect manner in which each is subordinated to the other, that makes up a whole which the world cannot match, and which never fails to impress even those who are most indifferent to the effects produced by architectural objects in general.

The plan and section (Woodcuts Nos. 338, 339) explain sufficiently the general arrangement and structural peculiarities of the tomb or principal building of the group. The raised platform on which it stands is 18 ft. high, faced with white marble, and exactly 313 ft. square. At each corner of this terrace stands a minaret 133 ft.

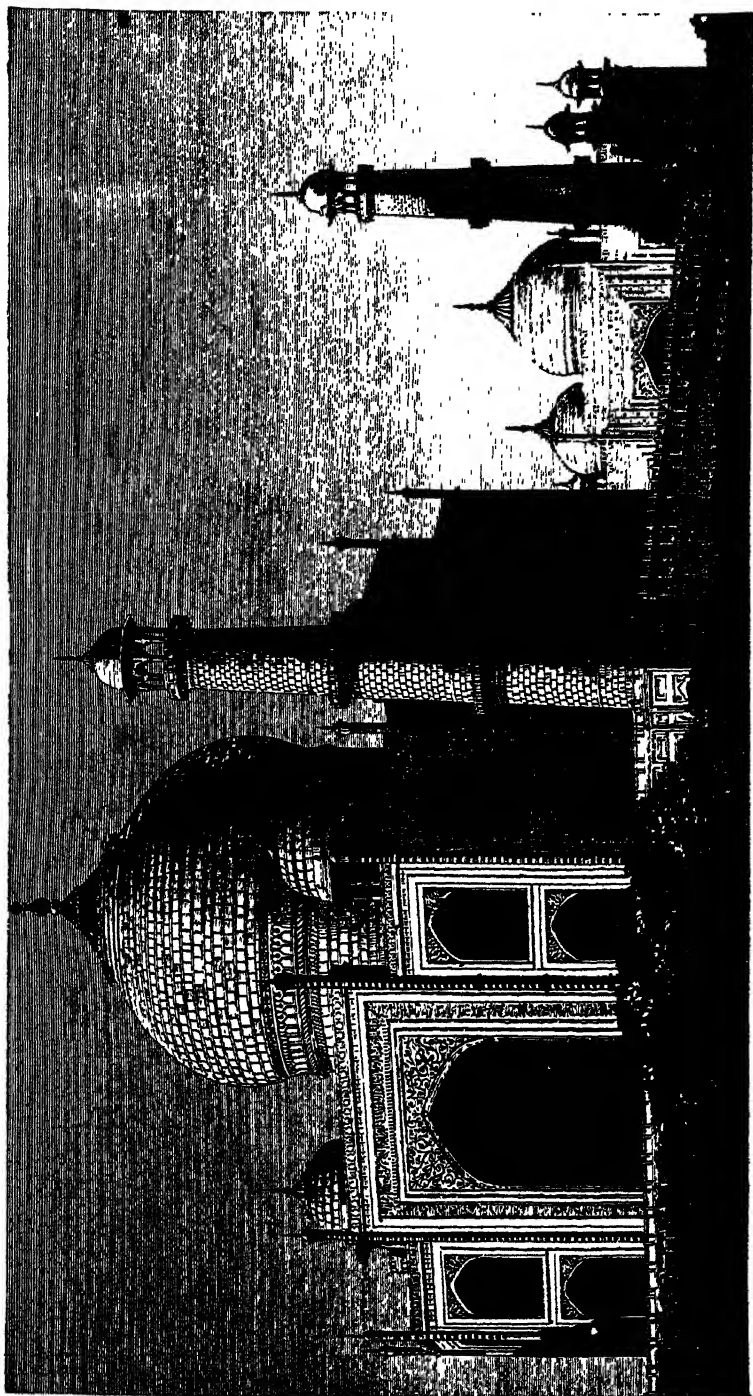
rounds the town would in a very few hours knock the palace walls about the ears of any garrison that might be caught in such a trap.

The truth of the matter appears to be this: the engineers perceived that by gutting the palace they could provide at no trouble or expense a wall round their barrack-yard, and one that no drunken soldier could scale without detection, and for this or some such wretched motive of economy the palace was sacrificed!

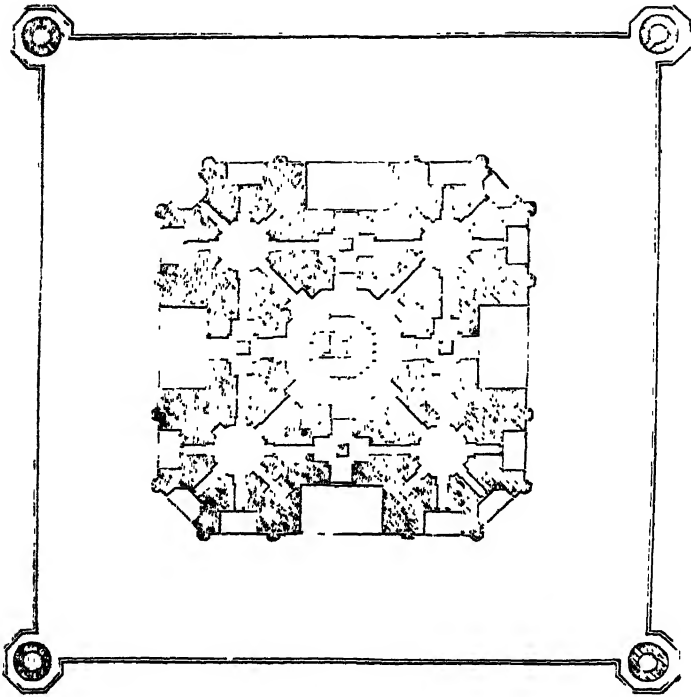
The only modern act to be compared with this is the destruction of the summer palace at Peking. That, however, was an act of red-handed war, and may have been a political necessity. This was a deliberate act of unnecessary Vandalism — most discreditable to all concerned in it.

¹ A plan of this garden, with the Taje and all the surrounding buildings, will be found in the 'Journal of the Royal Asiatic Society,' vol. vii. p. 42.

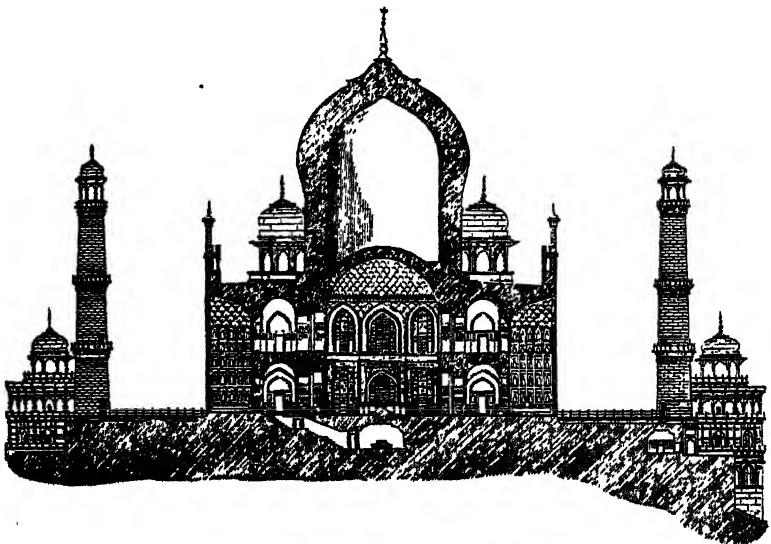
TAJE MEHAL.



View of Tadj-Mehal. (From a Photograph.)



338. Plan of Taje Mehal, Agra. (From a Plan by the Author.) Scale 100 ft. to 1 in.



339.

Section of Taje Mehal, Agra. Scale 110 ft. to 1 in.

in height, and of the most exquisite proportions, more beautiful, perhaps, than any other in India. In the centre of this marble platform stands the mausoleum, a square of 186 ft., with the corners cut off to the extent of 33 ft. 9 in. The centre of this is occupied by the principal dome, 58 ft. in diameter and 80 ft. in height, under which is an enclosure formed by a screen of trellis-work of white marble, a chef-d'œuvre of elegance in Indian art.¹ Within this stand the tombs—that of Mūmtaz-i-Mehal in the centre, and that of Shah Jehan on one side. These, however, as is usual in Indian sepulchres, are not the true tombs—the bodies rest in a vault, level with the surface of the ground (as seen in the section) beneath plainer tombstones, placed exactly underneath those in the hall above.

In every angle of the building is a small domical apartment of two storeys in height, 26 ft. 8 in. in diameter, and these are connected, as shown in the plan, by various passages and halls.

The light to the central apartment is admitted only through double screens of white marble trellis-work of the most exquisite design, one on the outer, and one on the inner face of the walls. In our climate this would produce nearly complete darkness: but in India, and in a building wholly composed of white marble, this was required to temper the glare that otherwise would have been intolerable. As it is, no words can express the chastened beauty of that central chamber, seen in the soft gloom of the subdued light that reaches it through the distant and half-closed openings that surround it. When used as a *Barrah Durrie*, or pleasure palace, it must always have been the coolest and the loveliest of garden retreats, and now that it is sacred to the dead it is the most graceful and the most impressive of the sepulchres of the world.

This building, too, is an exquisite example of that system of inlaying with precious stones which became the great characteristic of the style of the Moguls after the death of Akbar. All the spandrels of the Taje, all the angles and more important architectural details, are heightened by being inlaid with precious stones, such as agates, bloodstones, jaspers, and the like. These are combined in wreaths, scrolls, and frets, as exquisite in design as beautiful in colour; and, relieved by the pure white marble in which they are inlaid, they form the most beautiful and precious style of ornament ever adopted in architecture; though, of course, not to be compared with the intellectual beauty of Greek ornament, it certainly stands first among the purely decorative forms of architectural design. This mode of ornamentation is lavishly bestowed on the tombs themselves and the

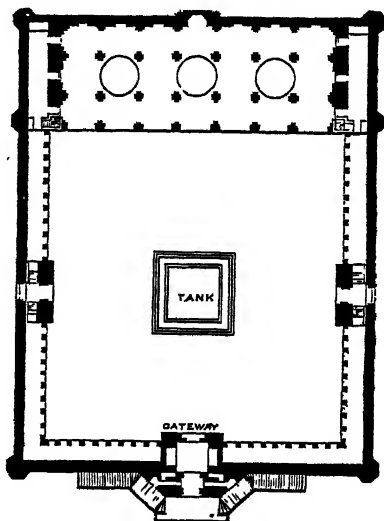
¹ From its design I cannot help fancy- Shah Jehan's death. It certainly looks ing that this screen was erected after more modern.

screen that surrounds them, though sparingly introduced on the mosque that forms one wing of the Taje, or on the fountains and surrounding buildings. The judgment, indeed, with which this style of ornament is apportioned to the various parts is almost as remarkable as the ornament itself, and conveys a high idea of the taste and skill of the Indian architects of that age.

The long rows of cypresses, which line the marble paths that intersect the garden at right angles, are now of venerable age: and, backed up by masses of evergreen foliage, lend a charm to the whole which the founder and his children could hardly have realised. Each of the main avenues among these trees has a canal along its centre studded with marble fountains, and each vista leads to some beautiful architectural object. With the Jumna in front, and this garden with its fountains and gateways behind; with its own purity of material and grace of form, the Taje may challenge comparison with any creation of the same sort in the whole world. Its beauty may not be of the highest class, but in its class it is unsurpassed.

Though neither so magnificent nor so richly ornamented as some of his other buildings, the Mîti Musjid, or Pearl Mosque, which Shah Jehan erected in the fort of Agra, is one of the purest and most elegant buildings of its class to be found anywhere (Woodcut No. 340). It is not large, measuring only 187 ft. by 234 ft. over all externally; and though raised on a lofty stylobate, which ought to give it dignity, it makes no pretensions to architectural effect on the outside; but the moment you enter by the eastern gateway the effect of its courtyard is surpassingly beautiful. The whole is of white marble, and the forms all graceful and elegant. The only ornament introduced which is not strictly architectural, is an inscription

in black marble, inlaid in the frieze of the mosque itself. The courtyard is nearly a square, 154 ft. by 158 ft. On three sides it is surrounded by a low colonnade 10 ft. 10 in. deep; but on the west, by the mosque itself, 159 ft. by 56 ft. internally. It opens on the court by seven arches of great beauty, and is surmounted by three



340. Plan of Mîti Musjid.
(From a Plan by Gen. Cunningham.)
Scale 100 ft. to 1 in.

domes of the bulbous form that became universal about this time (Woodcut No. 341). The woodcut cannot do it justice, it must be seen to be appreciated; but I hardly know, anywhere, of a building so perfectly pure and elegant, or one that forms such a wonderful contrast with the buildings of Akbar in the same palace.

The Jumma Masjid at Delhi is not unlike the Mīti Masjid in plan, though built on a very much larger scale, and adorned with two noble minarets, which are wanting in the Agra example; while from the somewhat capricious admixture of red sandstone with white marble, it is far from possessing the same elegance and purity of effect. It is, however, one of the few mosques, either in India or

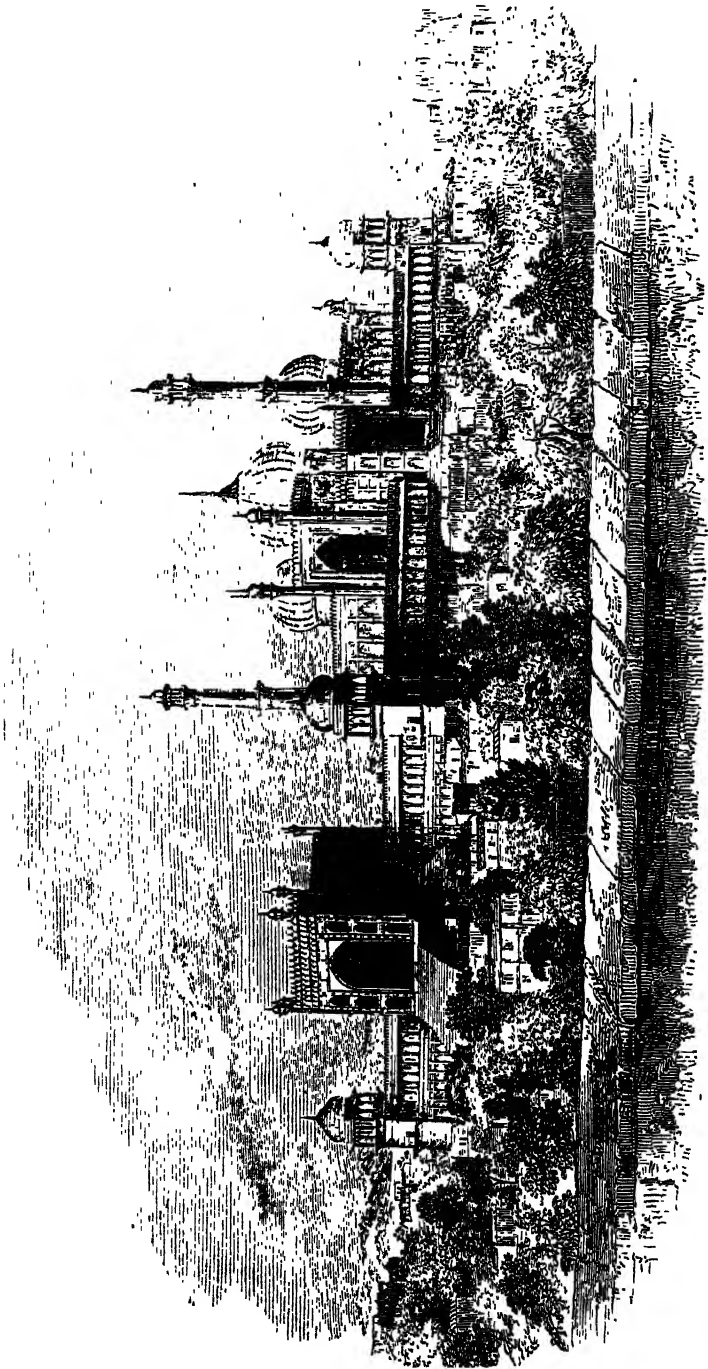


341.

View in Courtyard of Mīti Masjid, Agra. (From a Photograph.)

elsewhere, that is designed to produce a pleasing effect externally. As will be seen from the woodcut (No. 342), it is raised on a lofty basement, and its three gateways, combined with the four angle-towers and the frontispiece and domes of the mosque itself, make up a design where all the parts are pleasingly subordinated to one another, but at the same time produce a whole of great variety and elegance. Its principal gateway cannot be compared with that at Futtchpore Sikri (Woodcut No. 331); but it is a noble portal, and from its smaller dimensions more in harmony with the objects by which it is surrounded.

It is not a little singular, looking at the magnificent mosque



Great Mosque at Delhi from the N.E. (From a Sketch by the Author.

342.

700k 22 Apr 1874

which Akbar built in his palace at Futtehpore Sikri, and the Mûti Musjid, with which Shah Jehan adorned the palace at Agra, that he should have provided no place of worship in his palace at Delhi. The little Mûti mosque that is now found there was added by Aurungzebe, and, though pretty enough in itself, is very small, only 60 ft. square over all, and utterly unworthy of such a palace. There is no place of prayer, within the palace walls, of the time of Shah Jehan, nor, apparently, any intention of providing one. The Jumma Musjid was so near, and so apparently part of the same design, that it seems to have been considered sufficient to supply this apparently anomalous deficiency.

AURUNGZEBE, A.D. 1658-1707.

There are few things more startling in the history of this style than the rapid decline of taste that set in with the accession of Aurungzebe. The power of the Mogul empire reached its culminating point in his reign, and there were at least no external signs of decay visible before the end of his reign. Even if his morose disposition did not lead him to spend much money on palaces or civil buildings, his religious fanaticism might, one would think, have led him to surpass his predecessors in the extent or splendour of their mosques or religious establishments. This, however, is far from being the case. He did, indeed, as mentioned above, pull down the temple of Vishveshwar, at Benares, in order to erect a mosque, whose tall and graceful minarets still form one of the most prominent features in every view of the city. It was not, however, from any love of architectural magnificence that this was done, but to insult his Hindu subjects and mark the triumph of Islam over Hinduism. The mosque itself is of no great magnificence, but none more important was erected, so far as I know, during his reign.

Few things can show how steadily and rapidly the decline of taste had set in than the fact that when that monarch was residing at Aurungabad between the years 1650-70, having lost his favourite daughter, Rabia Dûraanee, he ordered his architects to reproduce an exact copy of his father's celebrated tomb, the Taje Mehal, in honour of her memory. They believed they were doing so, but the difference between the two monuments, even in so short an interval, is startling. The first stands alone in the world for certain qualities all can appreciate; the second is by no means remarkable for any qualities of elegance or design, and narrowly escapes vulgarity and bad taste. In the beginning of the present century a more literal copy of the Taje was erected in Lucknow over the tomb of one of its sovereigns. In this last, however, bad taste and tawdriness reign supreme. It is difficult to understand how a thing can be so like in form and so

unlike in spirit ; but so it is, and these three Tajcs form a very perfect scale by which to measure the decline of art since the great Mogul dynasty passed its zenith and began its rapid downward career.

Aurungzebe himself lies buried in a small hamlet just above the caves of Ellora. The spot is esteemed sacred, but the tomb is mean and insignificant beyond what would have sufficed for any of his nobles. He neglected, apparently, to provide for himself this necessary adjunct to a Tartar's glory, and his successors were too weak, even had they been inclined, to supply the omission. Strange to say, the sacred Tulsi-tree of the Hindus has taken root in a crevice of the brickwork, and is flourishing there as if in derision of the most bigoted persecutor the Hindus ever experienced.

We have scarcely any remains of Aurungzebe's own works, except, as before observed, a few additions to the palace at Delhi ; but during his reign many splendid palaces were erected, both in the capital and elsewhere. The most extensive and splendid of these was that built by his aspiring but unfortunate son Dara Shekoh. It, however, was converted into the English residency ; and so completely have improvements, with plaster and whitewash, done their work, that it requires some ingenuity to find out that it was not wholly the work of the Anglo-Saxons.

In the town of Delhi many palaces of the age of Aurungzebe have escaped this profanation, but generally they are either in ruins or used as shops ; and with all their splendour show too clearly the degradation of style which had then fairly set in, and which is even more apparent in the modern capitals of Oude, Hyderabad, and other cities which have risen into importance during the last hundred years.

Even these capitals, however, are not without edifices of a palatial class, which from their size and the picturesqueness of their forms deserve attention, and to an eye educated among the plaster glories of the Alhambra would seem objects of no small interest and beauty. Few, however, are built of either marble or squared stone : most of them are of brick or rubble-stone, and the ornaments in stucco, which, coupled with the inferiority of their design, will always prevent their being admired in immediate proximity with the glories of Agra and Delhi.

In a history of Mahomedan art in India which had any pretensions to be exhaustive, it would be necessary to describe before concluding many minor buildings, especially tombs, which are found in every corner of the land. For in addition to the Imperial tombs, mentioned above, the neighbourhoods of Agra and Delhi are crowded with those of the nobles of the court, some of them scarcely less magnificent than the mausolea of their masters.

Besides the tombs, however, in the capitals of the empire, there is scarcely a city of any importance in the whole course of the Ganges or Jumna, even as far eastward as Dacca, that does not possess some specimens of this form of architectural magnificence. Jaunpore and Allahabad are particularly rich in examples; but Patna and Dacca possess two of the most pleasing of the smaller class of tombs that are to be met with anywhere.

OUDE AND MYSORE.

If it were worth while to engrave a sufficient number of illustrations to make the subject intelligible, one or two chapters might very easily be filled with the architecture of these two dynasties. That of Mysore, though only lasting forty years—A.D. 1760–1799—was sufficiently far removed from European influence to practise a style retaining something of true architectural character. The pavilion called the Deriah Doulut at Seringapatam resembles somewhat the nearly contemporary palace at Deeg in style, but is feebler and of a much less ornamental character.¹ The tomb, too, of the founder of the dynasty, and the surrounding mausolea, retain a reminiscence of former greatness, but will not stand comparison with the Imperial tombs of Agra and Delhi.

On the other hand, the tomb of Saftar Jung, the founder of the Lucknow dynasty, situated not far from the Kutub at Delhi, is not quite unworthy of the locality in which it is found. Though so late in date (A.D. 1756), it looks grand and imposing at a distance, but it will not bear close inspection. Even this qualified praise can hardly be awarded of any of the buildings in the capital in which his dynasty was finally established.

If mass and richness of ornamentation were in themselves sufficient to constitute architecture, few capitals in India could show so much of it as Lucknow. It is, in fact, amazing to observe to what an extent this dynasty filled its capitals with gorgeous buildings during the one short century of its existence, but all—or with the fewest possible exceptions—in the worst possible taste. Whatever may be said of the Renaissance, or revival of classical architecture in Europe in the 16th century, in India it was an unmitigated misfortune. The unintelligent vulgarity with which the “Orders” are there used, by a people who were capable of such noble things in their own styles, is one of the most startling phenomena in the history of architecture. The subject hardly belongs to this work, and has already been treated of in the ‘History of Modern Architecture.’²

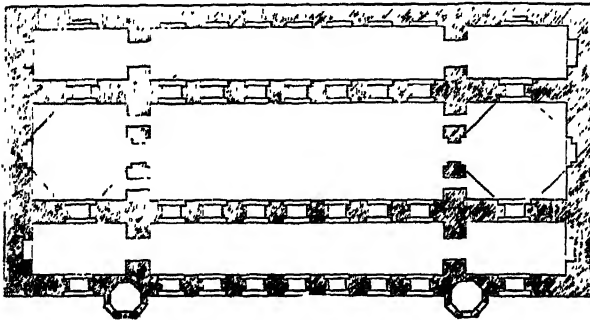
Even at Lucknow, however, there are some buildings into which

¹ There are eight photographs of it in Capt. Lyon’s collection, and many also by others.

² Page 478, *et seqq.*

the European heaven has not penetrated, and which are worthy of being mentioned in the same volume as the works of their ancestors. Among these is the great Inambara, which, though its details will not bear too close an examination, is still conceived on so grand a scale as to entitle it to rank with the buildings of an earlier age.

As seen by the plan of the Inambara (Woodcut No. 343), the principal apartment is 162 ft. long by 53 ft. 6 in. wide. On the two sides are verandahs, respectively 26 ft. 6 in. and 27 ft. 3 in. wide, and at each end an octagonal apartment, 53 ft. in diameter, the whole interior dimensions being thus 263 ft. by 145 ft. This immense building is covered with vaults of very simple form and still simpler construction, being of a rubble or coarse concrete several feet



343. Plan of Inambara at Lucknow. (From Measurements by the Author.) Scale 100 ft. to 1 in.

in thickness, which is laid on a rude mould or centering of bricks and mud, and allowed to stand a year or two to set and dry. The centering is then removed, and the vault, being in one piece, stands without abutment or thrust, apparently a better and more durable form of roof than our most scientific Gothic vaulting; certainly far cheaper and far more easily made, since it is literally cast on a mud form, which may be moulded into any shape the fancy of the architect may dictate.

It would be a curious and instructive subject of speculation to try to ascertain what would have been the fate of Mahomedan architecture in India had no European influence been brought to bear upon it. The materials for the inquiry are not abundant, but we can perceive that the decadence had set in long before the death of Aurungzebe. It is also evident that in such buildings as were erected at Agra or Delhi during the lapse of the 18th century, even where no European influence can be traced, there is a febleness and want of true perception, though occasionally combined with a considerable degree of elegance. There, however, the inquiry fails, because European influence made itself felt before any actual change had developed itself, but in remote

corners the downward progress became apparent without any extraordinary assistance. This is partially the case, as just mentioned, in the Mysore; but there is a cemetery at Junaghur, in Gujerat, where there exists a group of tombs, all erected within this century, some within the last twenty or thirty years, which exhibit more nearly than any others I am acquainted with the forms towards which the



Tomb of the late Nawab of Junaghur. (From a Photograph.)

style was tending. The style is not without a certain amount of elegance in detail (Woodcut No. 344). The tracery of the windows is frequently fascinating from its beauty, and all the carving is executed with precision and appropriateness—but it is all wooden, or, in other words, every detail would be more appropriate for a sideboard or a bedstead, or any article of upholstery, than for a building in stone.

The domes especially can hardly be traced back to their grand and solemn form as used by the Pathan architects. The pinnacles are fanciful, and the brackets designed more for ornament than work. It is a style, in fact, broken loose from the true principles of constructive design, and when this is the case, no amount of ornament, however elegant it may be, will redeem the want of propriety it inevitably exhibits.

It is curious, however, and instructive, in concluding our history of architecture as practised within the limits of India properly so called, to observe how completely we have been walking in a circle. We began by tracing how, two hundred years before Christ, a wooden style was gradually assuming lithic forms, and by degrees being elaborated into a style where hardly a reminiscence of wood remained. We conclude with finding the style of Hullabid and Bijapur, or Delhi, returning to forms as appropriate to carpentry but as unsuited to masonry as the rails or gateways at Bharhut or Sanchi. It might some time ago have been a question worth mooted whether it was likely it would perish by persevering in this wrong direction. That enquiry, however, seems idle now, as it is to be feared that the death-blow will be given, as at Lucknow and elsewhere, by the fatal imitation of a foreign style.

CHAPTER XI.

WOODEN ARCHITECTURE.

CONTENTS.

Mosque of Shah Hamadan, Srinugger.

KASHMIR.

TURNING for the nonce from this quasi-wooden style—which is only an indication of decadence and decrepitude—it would be pleasing if we could finish our narrative with the description of a true wooden style as it exists in Kashmir. The Jumma Musjid, in the city of Srinugger, is a large and important building, and if not so magnificent as some of those described in the preceding pages, is of great interest from being designed to be constructed in wood, and wood only. A knowledge of its peculiarities would, consequently, help us much in understanding many problems that arise in investigating the history of architecture in India. Unfortunately it is not a fashionable building, and of the 1001 tourists who visit the valley no one mentions it, and no photographer has yet set up his camera within its precincts.¹

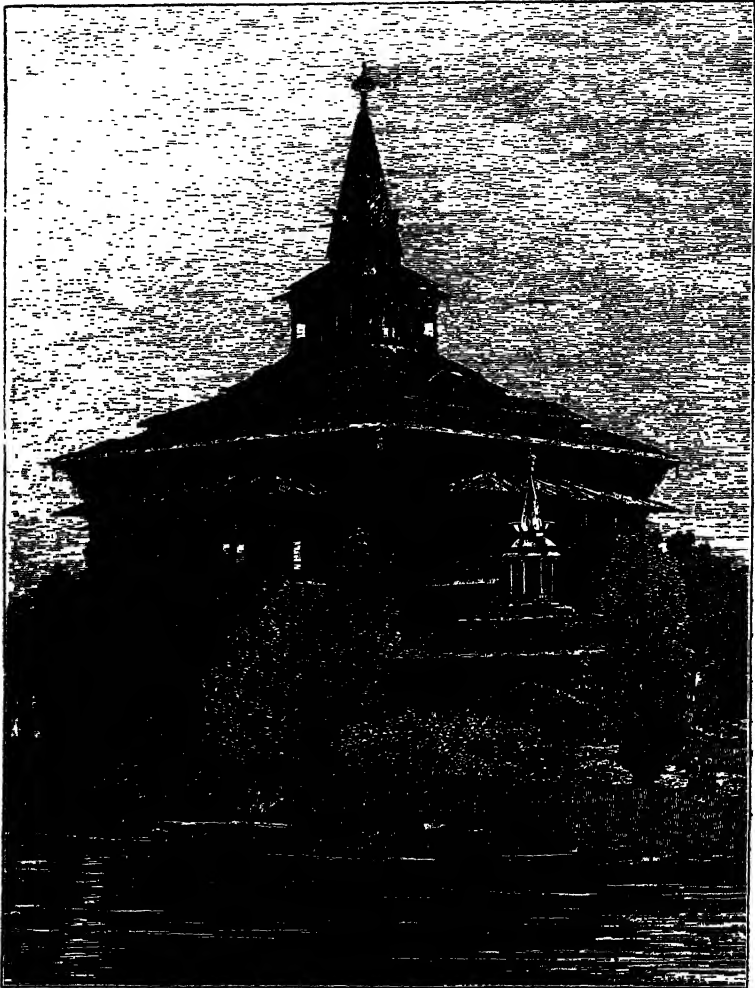
Its plan apparently is the usual one: a courtyard surrounded by cloisters, longer and loftier on the side towards Mecca, its peculiarity being that all the pillars that support its roofs are of Deodar pine—not used, of course, to imitate stone or stone construction, but honest wooden forms, as in Burmese monasteries and elsewhere. The carving on them is, I believe, rich and beautiful, and though dilapidated, the effect is said to be still singularly pleasing.

There is one other mosque in the same city, known as that of Shah Hamadan (Woodcut No. 345), which is equally erected wholly in wood, and though very much smaller than the Jumma Musjid, is interesting, in the first place, because its roof is probably very similar to that which once covered the temple at Marttand (Woodcut No. 161), and the crowning ornament is evidently a reminiscence of a Buddhist

¹ If Lieut. Cole, instead of repeating plans and details of buildings which had already been published by Gen. Cunningham, had given us a plan and details of this unknown building, he might have rendered a service all would have been grateful for. What I know of it is principally derived from verbal communication with Col. Montgomerie, R.E.

Tee, very much altered, it must be confessed, but still not so very unlike some found in Nepal, as at Swayambunath (Woodcut No. 170), for instance, and elsewhere.

The walls, too, are of interest to us, because the mode in which the



Mosque of Shah Hamadan, Srinugger. (From a Photograph.)

logs are disposed and ornamented resembles the ornamentation of the Orissan temples more clearly than any stone forms we can call to mind. The courses of the stone work in the tower of the great temple at Bhuvaneswar (Woodcut No. 233), the Moitre Serai, and other temples there, produce so nearly the same effect, that it does not seem

improbable they may have been derived from some such original. The mode, too, in which the Orissan temples are carved, and the extent to which that class of ornamentation is carried, is much more suggestive of a wooden than of a lithic origin.

These, however, are questions that can only be profitably discussed when we have more knowledge of this Kashmiri style than we now possess. When the requisite materials are available for the purpose, there are few chapters that will be of greater interest, or that will more worthily conclude the Architectural History of India than those that treat of the true and false styles of wooden art, with which the narrative begins, and with which it also ends.

BOOK VIII.

FURTHER INDIA.

CHAPTER I.

BURMAH.

CONTENTS.

Introductory—Ruins of Thaton, Prome, and Pagan—Circular Dagobas—
Monasteries.

INTRODUCTORY.

THE styles of architecture described in the preceding chapters of this volume practically exhaust the enumeration of all those which were practised in India Proper, with its adjacent island of Ceylon, from the earliest dawn of our knowledge till the present day. It might, therefore, be possible to treat their description as a work complete in itself, and to conclude without reference to other styles practised in neighbouring countries. It will add, however, immensely not only to the interest but to the completeness of the work, if the history is continued through the architectural forms of those countries which adopted religions originating in India, and borrowed with them architectural forms which expressed, with more or less distinctness, how far their religious beliefs differed from, or agreed with, those of the country from which they were derived.

The first of these countries to which we naturally turn is Burmah, which adopted the religion of Sakya Muni at a very early period, and borrowed also many of the Indian forms of architecture, but with differences we are now at a loss to account for. It may be, that, as we know nothing practically of the architectural forms of the Lower Bengal provinces before the beginning of the 6th century, these forms may have been taken to Prome and Pegu before that time; or it may be that a northern or Thibetan element crept into Burmah across the northern mountains by some route we cannot now follow. These are interesting problems we shall not be able to solve till

we have a more critical knowledge than we now possess of Burmese buildings. Thanks to the zeal and intelligence of some recent English travellers, we do know a great deal about Burmese art. The works of Symes,¹ Crawford,² and, above all, of Colonel Yule,³ are replete with information; but what they did was done in the intervals they were able to snatch from pressing public duties. What is really wanted is, that some qualified person should take up the subject specially, and travel through the country with no other object than to investigate its antiquities. With the knowledge we now have, six months spent on such a mission ought to tell us all, or nearly all, we now want to know.⁴ Pending that being done, we must be content to leave a good deal still to be explained by future investigators.

THATUN.

The earliest really authentic notice we have of these countries is in the 'Mahawanso.' It is there related that, after the third convocation—B.C. 246—Asoka despatched two missionaries, Sono and Uttaro, to Souverna Bhumi, the Golden Land, to carry the glad tidings of the religion of the Vanquisher.⁵ It is now perfectly ascertained that this place was almost certainly the Golden Chersonese of classical geographers, situated on the Sitang river, and now called Thatun, about forty miles' travelling distance north from Martaban.⁶ Since it ceased to be a place of importance, either by the silting up from the river or the elevation of the land, it is now no longer a port; but there can be little doubt that for some centuries before and after the Christian Era it was the emporium through which a very considerable portion of the trade between China and the western world was carried on. The line of passage was apparently across the Bay of Bengal from the delta of the Kistnah and Godavery; and it was to this trade route that we probably owe the rise and importance of Amravati till it was superseded by the direct sea-voyage from Gujerat and the west coast of India in the 6th century. The place was sacked

¹ 'Embassy to Ava in 1795.' London, 1800, 4to, 27 plates.

² 'Journal of Embassy to Court of Ava,' 1827. 4to., plates.

³ 'Mission to Court of Ava in 1855.' 4to., numerous illustrations.

⁴ If any of our 1001 idle young men who do not know what to do with themselves or their money would only qualify themselves for, and carry out such a mission, it is wonderful how easily and

how pleasantly they might add to our stores of knowledge. I am afraid it is not in the nature of the Anglo-Saxon to think of such a thing. Fox-hunting and pleasant-shooting are more congenial pursuits.

⁵ 'Mahawanso,' p. 71.

⁶ R. F. St. John, in the 'Phoenix,' vol. ii. p. 204, *et seqq.* Sir Arthur Phayre, in 'Journal of the Asiatic Society of Bengal,' vol. xlii. p. 23, *et seqq.*

and entirely destroyed. according to Sir A. Phayre, in A.D. 1080, by Anauratha, king of Pegu; but long before that time it had been dwindling, from the growing importance of Pegu, which was founded in A.D. 517 or A.D. 573.¹

The only description of its ruins is by St. Andrew St. John, in the second volume of the 'Phoenix' above referred to; but they seem even now to be very extensive, in spite of neglect and consequent decay. The walls can still be traced for 7700 ft. in one direction by 4000 ft. in another, enclosing a regular oblong of more than 700 acres. In this enclosure are several old pagodas, some, unfortunately, recently repaired, but all of a form we have not yet met with, though we shall presently when we come to speak of Java.

The principal pagoda here, like all the others, is built of hewn laterite. Its base is a square, measuring 104 ft. each way, and 18 ft. high; the second storey is 70 ft. square and 16½ ft. high; the third 48 ft. square and 12 ft. high. On this now stands a circular pagoda, making up the whole height to 85 ft. Mr. St. John fancies this circular part may be much more modern than the rest, but he adds, "the whole face of the pagoda has been carved in patterns; but the most remarkable part is the second storey, to which access is given by four flights of steps, one in the centre of each face. The whole was apparently adorned with sculptures of the most elaborate character."

There seem to be no data to enable us to fix with certainty the date of this or of other similar pagodas in this place, and no photographs to enable us to speak with certainty as to their details, which is to be regretted, as it is just in such an old city as this that we may expect to find those early forms which may explain so much that is now unintelligible in subsequent examples. Thatún was coeval with Anuradhapura in Ceylon, and if examined with care, might do as much for the square form of temple as the island capital may do for the round form. Their greatest interest would, however, arise from the light they might throw on the square temples of Pagan and other Burmese cities, whose origin it has hitherto been impossible to explain. Meanwhile it is a fact worth bearing in mind that we find here square three-storeyed pagodas, which certainly were erected before A.D. 1080, when the city was destroyed, and probably before the 6th century, when it was practically superseded by the rise of the new city and kingdom of Pegu.

PROME.

If we might trust the Burmese annals, Prome was a capital city as early as the year 101 of Faith, or after the Nirvana of Buddha.² In

¹ Sir A. Phayre, *loc. cit.*

² Crawford's 'Embassy to Ava,' vol. ii. p. 277.

other words, it seems probable that Buddhist missionaries from the second convocation held under Kalasoka, in the previous year (B.C. 483), established themselves here, and introduced the new religion into the country.¹ The real political capital of the country at that time seems to have been Tagoung, half-way between Ava and Bhamo, on the Upper Irawaddi.² Prome, however, seems to have continued the religious capital till A.D. 107, when the two capitals were amalgamated, under the name of Old Pagan on the northern site, to be again transferred to New Pagan, below Ava, about the year 847.³ Upper Pagan seems to have been visited by Captain Hannay, in A.D. 1835, and by others subsequently, and the remains are described as extensive, but too much ruined and obscured by jungle to admit of any scientific investigation. Those of Prome would probably be even more interesting; but I know of no description that enables us to ascertain what they really are. I have photographs of some dagobas—rather too tall to be very old—but, without some mouldings or architectural details, it is impossible to guess even what their age may be; so that practically the architectural history of Burmah begins with the foundation of Pagan in the middle of the 9th century, and as it was destroyed by the Chinese, or rather the Tartar army of Kublai Khan, in 1284,⁴ its glory lasted little more than four centuries. During that period, however, it was adorned by a very extensive series of monuments, most of which still remain in a state of very tolerable preservation.

It will thus be observed that the rise and fall of Pagan are, as nearly as may be, coincident with that of Pollonaruwa, in Ceylon; but the Burmese city seems to have excelled the Ceylonese capital both in the extent of its buildings and in their magnificence. Their differences, too, both in form and detail, are very remarkable, but, if properly investigated, would throw light on many religious and ethnographical problems that are now very obscure.

PAGAN.

The ruins of Pagan extend about eight miles in length along the river, with an average breadth of about two miles, and within that space Colonel Yule estimates there may still be traced the remains of 800 or 1000 temples. Several of these are of great magnificence, and

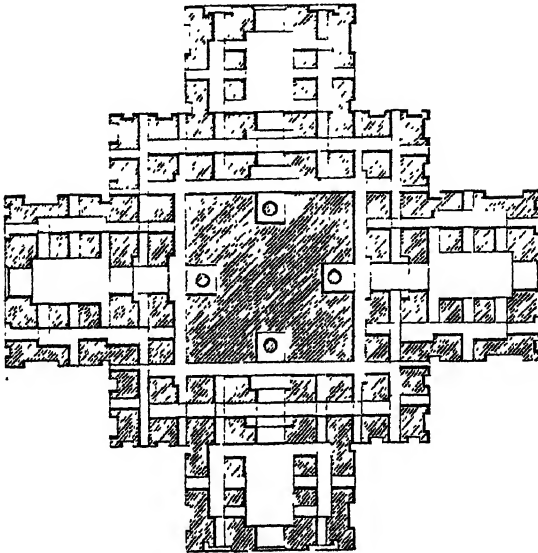
¹ It has recently become the fashion to doubt the holding of this convocation 100 years after the death of Buddha; but this very pointed allusion to it, in the early Burmese annals, so completely confirms what is said in the 'Mahawanso.' that the fact of its being held does not appear to me doubtful.

² Yule, 'Mission to Ava,' p. 30.

³ Loc. cit., p. 32.

⁴ Yule's 'Marco Polo,' vol. ii. p. 84, et seqq.

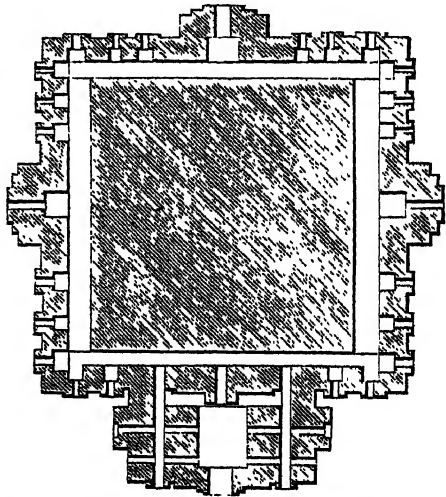
are kept in a state of repair ; but the bulk of them are in ruins, and the forms of the greater part hardly distinguishable.



346.

Plan of Ananda Temple. (From Yule.) Scale 100 ft. to 1 in.

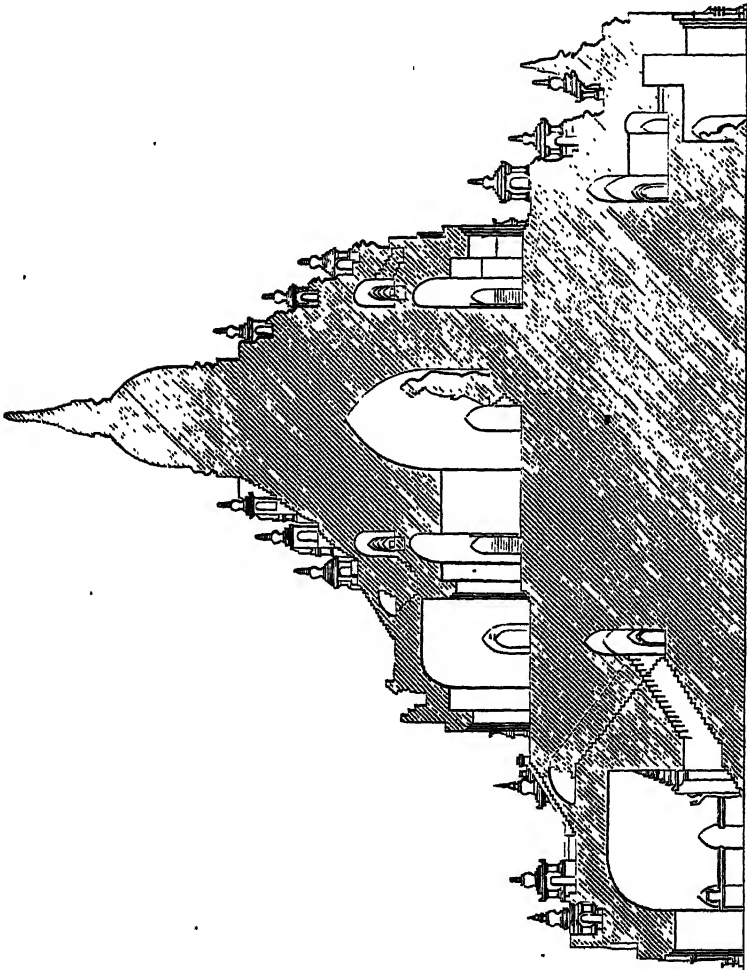
Of these, one of the most remarkable is that of Ananda. As will be seen from the annexed plan (Woodcut No. 346), it is a square of nearly 200 ft. on each side, with projecting porticos on each face, so that it measures 280 ft. across each way. Like all the great pagodas of the city, it is seven storeys in height ; six of these are square and flat, each diminishing in extent, so as to give the whole a pyramidal form ; the seventh, which is or simulates the cell of the temple, takes the form of a Hindu or Jaina temple, the whole in this instance rising to the height of 188 ft.



347. Plan of Thapinya. (From Yule.) Scale 100 ft. to 1 in.

Internally, the building is extremely solid, being intersected only

by two narrow concentric corridors; but in rear of each projecting transept is a niche most artificially lighted from above, in which stands a statue of Buddha more than 30 ft. in height. This is the arrangement we find in the Chaumuk temple at Palitana and at Sadri (Woodcut No. 133), both Jaina temples of the 15th century,



Section of Thaphya. (From Yule.) Scale 50 ft. to 1 in.

348.

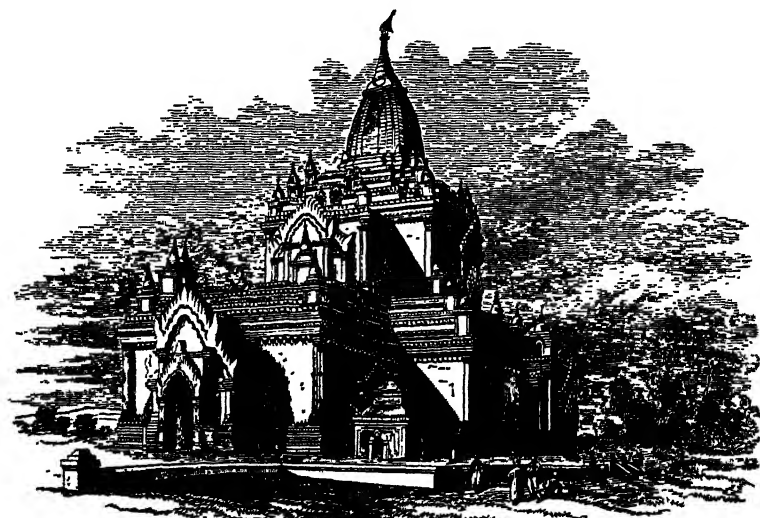
and which it is consequently rather surprising to find here as early as the 11th century (A.D. 1066¹); but the form and the whole of the arrangement of these temples are so unlike what we find elsewhere that we must be prepared for any amount of anomalies.

¹ Yule, 'Mission to Ava,' p. 36. As and best, it will not be necessary to almost all the particulars here mentioned repeat references on every page. are taken from this work as the latest

Next in rank to this is the Thapinya—the Omniscient—erected about the year 1100 by the grandson of the king who built the Ananda. It is very similar to the Ananda both in dimensions and in plan, except that it has only one porch instead of four, and consequently only one great statue in its cell instead of four standing back to back. Its height is 201 ft., and it is the highest in the place (Woodcuts Nos. 347, 348).

The third in importance is called the Gaudapalen, built in 1160. This temple is smaller than those just mentioned, but makes up in richness and beauty of detail for its more diminutive dimensions.

The Dhamayangyee, now in ruins, is quite equal in dimensions to the Ananda, and very much resembles it in plan and design; while one called the Sem Byo Koo, is, in its details, the most beautiful of any.



349.

View of the Temple of Gaudapalen. (From Yule.)

The general appearance of these temples will be understood from the annexed view (Woodcut No. 349) of that called Gaudapalen, and their general arrangements from the section of the Thapinya, of which a plan is given (Woodcut No. 347). They are all so similar that it is needless to multiply illustrations, the only real difference being in the greater or less amount of ornament in stucco which has been applied to each.

The first thing that strikes the inquirer on examining these temples is their remarkable dissimilarity with anything on the continent of India. They are not topes in any sense of the term, nor are they viharas. The one building we have hitherto met with which they in any way resemble is the seven-storeyed Prasada at Polonnaruwa (Woodcut No. 106), which, no doubt, belongs to the same

class. It is possible that the square pagodas at Thatún, when properly examined, may contain the explanation we are searching for. They evidently were not alone, and many other examples may still be found when looked for. On the whole, however, I am inclined to believe, improbable as it may at first sight appear, that their real synonyms are to be found in Babylonia, not in India. The Birs Nimroud is, like them, a seven-storeyed temple, with external stairs, leading to a crowning cell or sanctuary. Of course, during the seventeen centuries which elapsed between the erection of the two buildings, considerable changes have taken place. The lowest stairs in Burmah have become internal; in Babylonia they were apparently external. At the head of the third flight at the Birs, Sir Henry Rawlinson found the remains of three recesses. At Pagan these had been pushed into the centre of the third storey. The external flights were continued on the upper three storeys at both places; but in Babylonia they lead to what seems to have been the real sanctuary, in Burmah to a simulated one only, but of a form which, in India, always contained a cell and an image of the deity to whom the temple was dedicated.

It may be asked, How is it possible that a Babylonian form should reach Burmah without leaving traces of its passage through India? It is hardly a sufficient answer to say it must have come *via* Thibet and Central Asia; because, in the present state of our knowledge, we do not know of such a route being used. It is a more probable explanation to say that such monuments may have existed in the great Gangetic cities, but, like these Burmese examples, in brick and plaster; and have perished, as they would be sure to do in that climate, and where hostile races succeeded the Buddhists. But, however it may be eventually accounted for, it hardly appears to me doubtful that these Burmese seven-storeyed temples are the lineal descendants of the Babylonian examples, and that we shall some day be able to supply the gaps which exist in their genealogy.

Meanwhile one thing must be borne in mind. The earliest capital of the Burmese was Tagoung in the north, and their real affinities are with the north. They got their religion by the southern route from Bengal, but it was engrafted on a stem of which we know very little, and all whose affinities have yet got to be traced to their source.

Before leaving these square temples, it may be well to point out some peculiarities which are new to us. In the first place it is a purely brick style, and, as such, using true radiating arches, not only to span the openings but to roof their passages and halls. This is so unlike what we find in any part of India Proper, that it seems to point with certainty to some foreign—most probably a northern—country for its origin. As frequently mentioned above, no Buddhist

arch is known to exist in India,¹ and, except in the reign of Akbar, hardly a Hindu one, in any temple down to the present day. It could hardly, in consequence, be derived from that country, but there is no reason for believing that the Chinese or Tartar nations ever showed any aversion to these forms. We know, at all events, that the Assyrians and Babylonians used brick arches long before the Christian Era, and the art may have been communicated by them to the nations of Northern Asia, and from them it may have come down the Irawaddi.

It would be a curious speculation to try and find out what the Jains in western India would have done had they been forced to use brick instead of stone during the 11th and 12th centuries, which was the great building epoch on the Irawaddi and in Gujerat. Possibly they would have arrived at the same conclusion, in which case we can only congratulate ourselves that the westerns were not tempted with the fatal facility of bricks and mortar.

Another peculiarity is, that these square Burmese pagodas adopt the curvilinear sikra of the Indo-Aryan style. This may be considered a sufficient indication that they derived some, at least, of their architectural features, as well as their religion, from India; but as this form was adopted by both Jains and Hindus in the north of India, from the mouths of the Indus to the Bay of Bengal in that age, it hardly enables us to point out the particular locality from which it was derived, or the time at which it was first introduced. It is, however, so far as we at present know, the only instance of its being found out of India Proper.

CIRCULAR DAGOBAS.

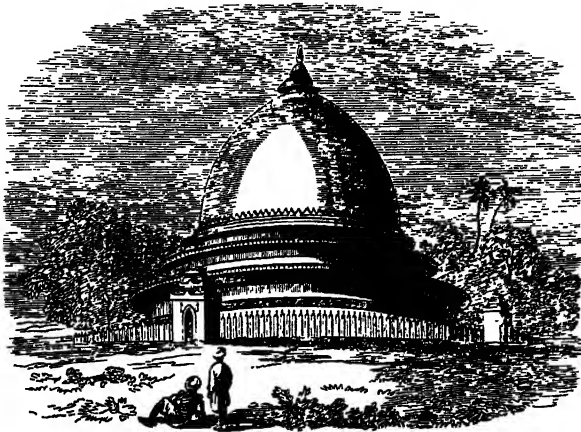
Leaving these square quasi-Jaina temples, which are clearly exceptional, the dagobas of Burmah are found to be generally much more like those which are found in India and Ceylon, though many, having been erected only in the present century, are of forms more complex and attenuated than those in India Proper.

The one most like the Indian type is that known as the Kong Madú, not far from Mengûn, on the same side of the river. The mass of the dome, according to Colonel Yule,² is about 100 ft. diameter. It is taller than a semicircle—which would indicate a modern date—and stands on three concentric bases, each wider than the other. Round the whole is a railing, consisting of 784 stone pillars, each standing about 6 ft. out of the ground, and divided into four quadrants

¹ I of course except the arches in the tower at Buddh Gaya, which, I believe, were introduced by these very Burmese in 1305. See *ante*, p. 69.

² 'Mission to Ava,' p. 65.

by four stone gateways (Woodcut No. 350). An inscription, on a white marble slab, records the erection of this pagoda between the



350.

Kong Madu Dagoba. (From Yule)

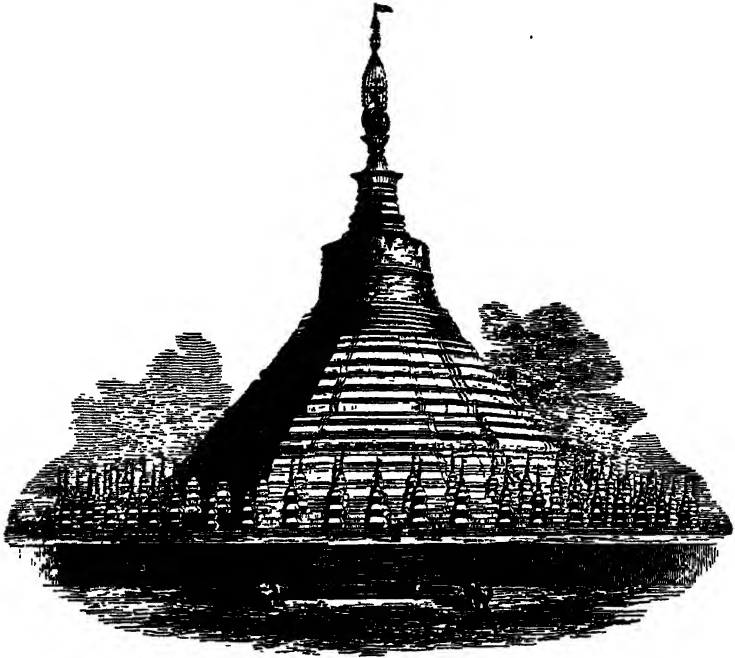
years 1636 and 1650. I, at one time, thought it must be older; but the evidence of recent explorations renders this date more probable than it formerly appeared. If correct, it is curious as showing how little real change had occurred during the sixteen centuries which elapsed between the erection of the tope at Sanchi (Woodcuts Nos. 10-12) and the seventeenth century.

Perhaps the most important pagoda in the Burmese empire is the great Shoëmadu¹ at Pegu, of which a plan and elevation are given from those published by Colonel Symes in his account of his embassy to Ava. As will be seen from the woodcuts (Nos. 351, 352), the plan deviates considerably from the circular form, which is exclusively used in the edifices of this class hitherto described, and approaches more nearly to those elaborately polygonal forms which are affected by all the Hindu builders of modern date. It returns, however, to the circular form before terminating, and is crowned, like all Burmese buildings of this class, by an iron spire or tee richly gilt.

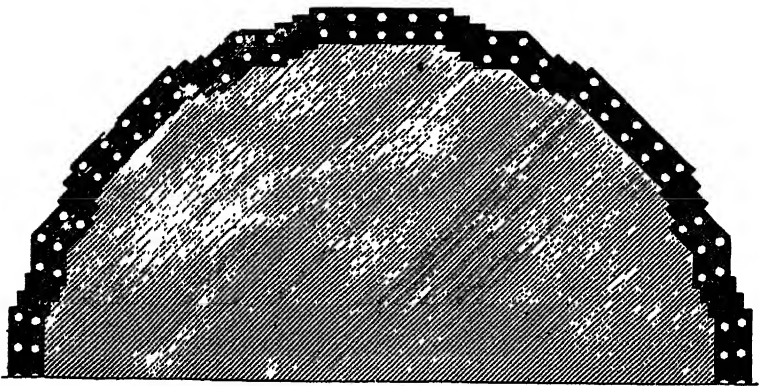
Another peculiarity is strongly indicative of its modern date: namely, that instead of a double or triple range of pillars surrounding its base, we have a double range of minute pagodas—a mode of ornamentation that subsequently became typical in Hindu architecture—their temples and spires being covered, and, indeed, composed of innumerable models of themselves, clustered together so as to make up a whole. As before remarked, something of the same sort occurs in Roman art, where every window and opening is surmounted by a

¹ Literally "Golden great god." Madu is the Burmese for Maha Deva.

pediment or miniature temple end, and in Gothic art, where a great spire is surrounded by pinnacles or spirelets ; but in these styles it is never carried to the same excess as in Hindu art. In the present



Shoemad Pagoda, Pegu. (From Col. Symes' 'Embassy to Ava.')



Hal-plan of Shoemadu Pagoda. (From Symes.) Scale 100 ft. to 1 in.

instance it is interesting, as being one of the earliest attempts at this class of decoration.

The building stands on two terraces, the lower one about 10 ft.

high, and 1391 ft. square ; the upper one, 20 ft. in height, and 684 ft. square ; from the centre rises the pagoda, the diameter of whose base is 395 ft. The small pagodas are 27 ft. high, and 108 or 110 in number ; while the great pagoda itself rises to the height of 331 ft. above its terrace, or 361 ft. above the country, thus reaching a height about equal to that of St. Paul's Cathedral : while the side of the upper terrace is only 83 ft. less than that of the great Pyramid.

Tradition ascribes its commencement to two merchants, who raised it to the height of 12 cubits, at an age slightly subsequent to that of Buddha himself. Successive kings of Pegu added to it from time to time, till at last it assumed its present form, most probably about three or four centuries ago.

The next in importance, so far as we know, is the more generally known Shoëdagong pagoda at Rangûn, a building very similar in dimensions to the last named, and by no means unlike it, except that the outline of the base is cut up to even a greater extent, and the spire more attenuated—both signs of a comparatively modern date. The base is even more crowded by little temples than that at Pegu, and its whole height is somewhat less. There is, however, no essential difference between the two buildings, and this is principally interesting as leading us one step further in the series from the solid hemispherical mound to the thin spire, which, both in Burmah and Siam, is the modern form usually assumed by these edifices, till they lose all but a traditional resemblance to the buildings from which they originally sprang.

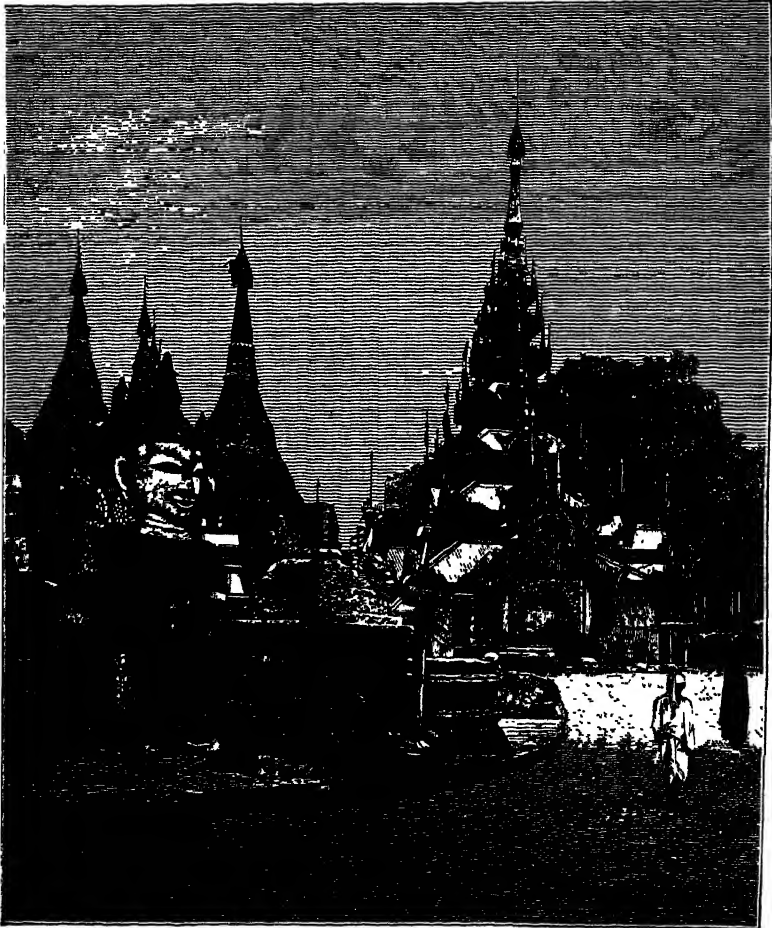
The general appearance of their spires may be gathered from the three shown on the left of the annexed woodcut (No. 353), which is precisely that of the Great Pagoda. This illustration is also valuable as showing the last lineal descendant of these great human-headed winged lions that once adorned the portals of the palaces at Nineveh ; but after nearly 3000 years of wandering and ill-treatment have degenerated into these wretched caricatures of their former selves.

The Shoëdagong pagoda, like all the more important ones, is fabled to have been commenced about 2300 years ago, or about the era of Buddha himself ; its sanctity, however, is owing to its containing relics, not only of the last Buddha, but also of his three predecessors—Buddha having vouchsafed eight hairs of his head to its two founders, on the understanding that they were to be enshrined with the relics of the three former Buddhas, where and when found.¹ After numerous miraculous indications, on this spot were discovered the staff of Kakusanda, believed to have lived some 3000 years before Christ, the water-dipper of Konagamma, and the bathing garment of Kasyapa, which, with the eight hairs above mentioned, are enshrined within

¹ See p. 58.

this great pagoda.¹ Originally, however, notwithstanding the value of its deposit, the building was small, and it is probably not more than a century since it assumed its present form.

A crowd of smaller pagodas surrounds the larger one, of all sizes, from 30 ft. to 200 ft. in height, and even more. There is scarcely a



353.

View of Pagoda in Rangun. (From a Photograph.)

village in the country that does not possess one or two, and in all the more important towns they are numbered by hundreds; indeed, they may almost be said to be innumerable. They are almost all quite modern, and so much alike as not to merit any distinct or separate

¹ See account of the Great Bell at Bangûn, by the Rev. G. H. Hough, 'Asiatic Researches,' vol. xiv. p. 270.

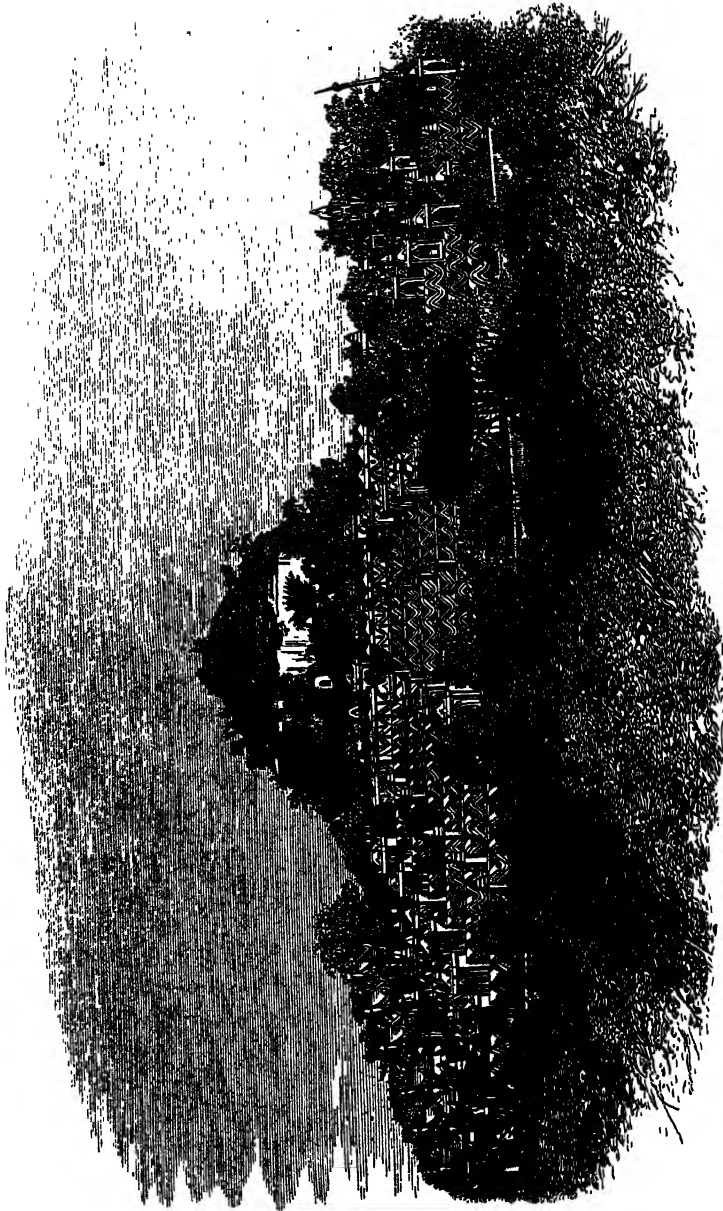
mention. They indicate, however, a great degree of progressive wealth and power in the nation, from the earliest times to the present day, and an increasing prevalence of the Buddhistical system. This is a direct contrast to the history of Ceylon, whose glory was greatest in the earliest centuries of the Christian Era, and was losing its purity at the time when the architectural history of Burmah first dawned upon us. Thus the buildings of one country supplement those of the other, and present together a series of examples of the same class, ranging over more than 2000 years, if we reckon from the oldest toposes in Ceylon to the most modern in Burmah.

At a place called MengÛn, about half-way between the former capital of Amrapura and the present one at Mandalé, are two pagodas, which are not without considerable interest for our present purposes; if for no other reason, at least for this—that both were erected within the limits of the present century, and show that neither the forms nor aspirations of the art were wholly extinguished even in our day. The first is circular in form, and was erected in the year 1816, in the reign of a king of Burmah called Bodo Piyah, who is also the author of the second. As will be seen from the woodcut (No. 35 \pm), it is practically a dagoba, with five concentric procession-paths. Each of these is ornamented by a curious serpent-like balustrade, interspersed with niches containing, or intended to contain, statues of Buddha, and is accessible by four flights of steps facing the four cardinal points. The whole is surrounded by a low circular wall, 750 ft. in diameter, said to represent the serpent Ananta. Within this is a basement, measuring about 400 ft. across, and this, with the procession-paths and dagoba on the summit, make up seven storeys, intended, it is said, to symbolise the mythical Mount Meru.¹

It will be recollected that, when speaking of the great dagobas of Anuradhapura in Ceylon, it was pointed out (*ante*, p. 190) that they had three procession-paths round their bases, ascended in like manner by flights of steps opposite the four cardinal points of the compass. It is interesting to observe here, after a lapse of 2000 years, and at a distance of nearly 1500 miles, the changes have been so small. It is true the number of procession-paths has increased from three to five, and the terraces become relatively much more important than in the older examples; but, barring this and some changes in detail, the

¹ The above particulars are abstracted from a paper by Col. Sladen in the 'Journal of the Royal Asiatic Society,' vol. iv. (N.S.) p. 406, with remarks by Col. Yule and others. It is curious that there is a discrepancy between the native and the European authorities as to the

number of storeys—not mechanical, of course, but symbolical; whether, in fact, the basement should be counted as a storey, or not. The above I believe to be the correct enumeration. We shall presently meet with the same difficulty in describing Boro Buddor in Java.



Circular Pagoda at Mengün. (From a Photograph.)

354.

monuments are practically the same, notwithstanding all the curious varieties that have sprung up in the interval.

The other pagoda at this place was commenced by the same king, called Mentara Gyé, or Bodo Piyah, who died in 1819, and seems to have been an attempt to revive the old square forms of Pagan, in the same manner as the other was intended to recall memories of the older forms of early Indian Buddhism. "It stands on a basement of five successive terraces, of little height, the lower terrace forming a square of 450 ft. From the upper terrace starts the vast cubical pile of the pagoda, 230 ft. square in plan, and rising, in a solid mass, to the height of about 100 ft., with slightly sloping walls. Above this it contracts in successive terraces, three of which had been completed, raising the mass to a height of 165 ft., at the time the work was abandoned."¹ From a model standing near, it is inferred that, if completed, it would have risen to the height of 500 ft.; it is even now a solid mass containing between 6,000,000 and 7,000,000 cubic feet of brickwork. Had it been carried out, it would have been the tallest building in the world. It was, however, shattered by an earthquake in 1839; but, even in its ruined state, is as large and imposing a mass of brickwork as is to be found anywhere.² Since the pyramids of Egypt, nothing so great has been attempted, and it belongs to the 19th century!

MONASTERIES.

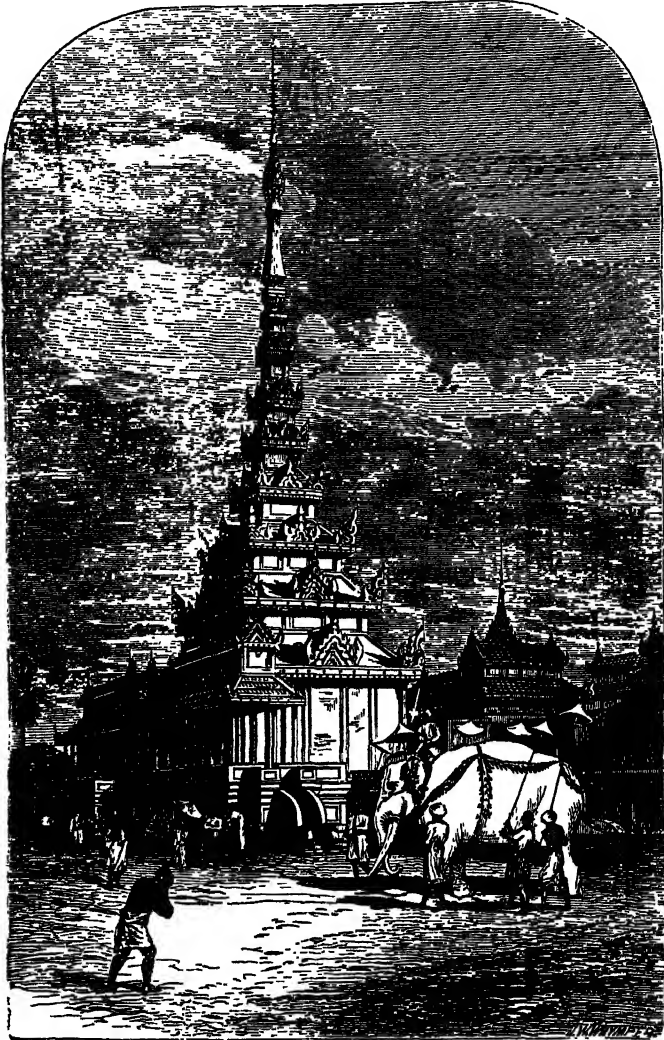
As Burmah is a country in which the monastic system of Buddhism flourishes at the present day to the fullest extent, if we had more information regarding its monasteries, or *kioums* as they are called, it might enable us to understand the arrangement of the older ones. The travellers who have visited the country have been silent on the subject, principally because the monasteries are, in almost all instances, less magnificent than the pagodas to which they are attached, and are, with scarcely an exception, built of wood—a practice destructive of their architectural character, and also depriving them wholly of that monumental appearance of stability which is so essential to true architectural expression.

This peculiarity is not confined to the monasteries; all residences, from that of the poorest peasant to the palace of the king, having been constructed from time immemorial of this perishable material. The custom has now passed into a law, that no one shall have the power of erecting buildings of stone or brick, except it be the king himself, or unless the edifices be of a purely religious character. Even this exception is not always taken advantage of, for the king's palace

¹ 'Mission to the Court of Ava,' p. 169.

² A view of this ruin will be found in Yule's 'Mission to Ava,' plate 23.

itself is as essentially a wooden erection as the dwelling of any of his subjects. It is, however, not the less magnificent on this account—rather, perhaps, more so—immense sums being spent on the most elaborate carvings, and the whole being lacquered, painted, and gilt,



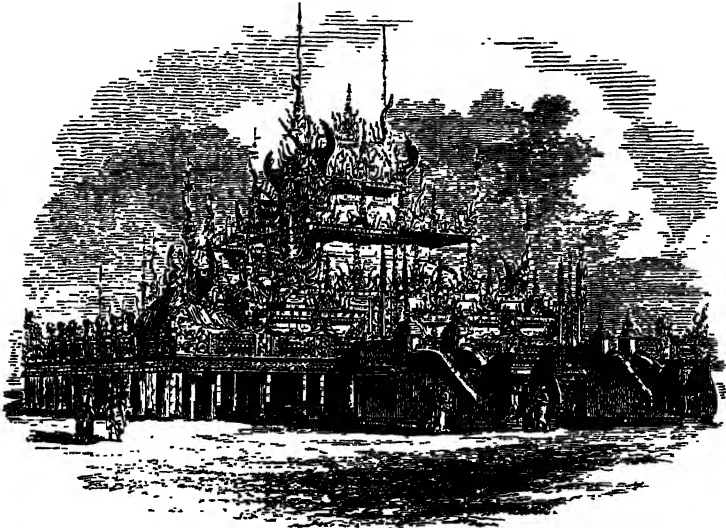
355. Façade of the King's Palace, Burmah. (From a Sketch by Col. Yule.)

to an extent of which we have no conception in our more sober clime.

The general appearance of the façade may be realised from the annexed view (Woodcut No. 355); but its real magnificence consists

in the profusion of gilding and carving with which every part is covered, and to which it is impossible to do justice on so small a scale.

The same profuse decorations are bestowed upon the monasteries, one of which is represented in the annexed woodcut (No. 356), showing a building in which all the defects arising from the use of so easily carved a material, are carried to excess. If the colouring and gilding could be added, it would represent a building such as the West never saw, and, let us hope, never will see: for, however dazzling its splendour, such barbaric magnificence is worthy only of a half-civilized race.

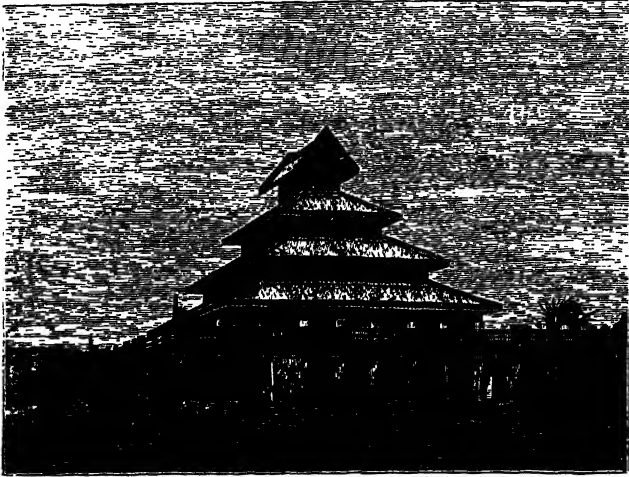


356.

Burme-e Kioum. (From Col. Symes' 'Embassy to Ava.')

The naked form of these monasteries—if the expression may be used—will be understood from the following woodcut (No. 357) of one recently erected at Mandalé, and, though inhabited, not quite finished. It is five storeys in height, and, if I mistake not, as nearly reproduces the Lowa Maha Paya of Anuradhapura, as the circular Mengün pagoda does the Abhayagiri or Ruanwelli dagobas there. Here, however, the storeys have lost their meaning; only one storey is used as a residence¹—the first, or “piano nobile,” as we would call it. The upper storeys are only ornamental reminiscences of past utilitarian forms, but which evidently once had a meaning. Had the building been completed—perhaps it is now—it would have been ornamented with carving as richly as that represented in the pre-

ceding woodcut, for it is one of the advantages of wooden architecture, that its decorative features may be added after the fabric is practically complete in all essential points.



357.

Monastery at Mandalay. (From a Photograph.)

These many-storeyed kioums, with the tall seven-storeyed spires (shown in Woodcuts Nos. 353 and 356), bring us back to the many-storeyed temples in Nepal, which are in all essential respects so nearly identical, that it can hardly be doubted they had a common origin. We are not yet in a position to point out the connecting links which will fuse the detached fragments of this style into a homogeneous whole, but it is probably in China that they must be looked for, only we know so little of the architectural history of the western portion of that great country, that we must wait for further information before even venturing on this subject.

The fact that all the buildings of Burmah are of wood, except the pagodas, may also explain how it is that India possesses no architectural remains anterior to the age of Asoka. Except the comparatively few masonry pagodas, none of which existed prior to his era, there is nothing in Burmah that a conflagration of a few hours would not destroy, or the desertion of a few years entirely obliterate. That the same was the practice of India is almost certain, from the essentially wooden forms still found prevailing in all the earlier cave temples; and, if so, this fully accounts for the disappearance of all earlier monuments.

We know that wooden architecture was the characteristic of Nineveh, where all the constructive parts were formed in this perishable material; and from the Bible we learn that Solomon's edifices were

chiefly so constructed. Persepolis presents us with the earliest instance in Asia of this wooden architecture being petrified, as it were—apparently in consequence of the intercourse its builders maintained with Egypt and with Greece.

In Burmah these wooden types still exist in more completeness than, perhaps, in any other country. Even if the student is not prepared to admit the direct ethnographic connexion between the buildings of Burmah and Babylon—which seems hardly to admit of doubt—he will at any rate best learn in this country to appreciate much in ancient architecture, which, without such a living illustration, it is hard to understand. Solomon's House of the Cedars of Lebanon is, with mere difference of detail, reproduced at Ava or Amrapura; and the palaces of Nineveh and Persepolis are rendered infinitely more intelligible by the study of these edifices. Burmah is almost equally important in enabling us to understand what an active, prosperous Buddhist community may have been in India at a time when that religion flourished there; and altogether, if means were available for its full elucidation, it would form one of the most interesting chapters in the History of Architecture in Asia.

CHAPTER II.

SIAM.

Pagodas at Ayuthia and Bangkok—Hall of Audience at Bangkok—General Remarks.

ALTHOUGH the architecture of Siam is very much less important than that of Burmah on the one hand, or Cambodia on the other, it is still sufficiently so to prevent its being passed over in a general summary of styles. Its worst feature, as we now know it, is, that it is so extremely modern. Up to the 14th century the capital of the country was Sokotay, a city on the Menam, 200 miles from the sea in a direct line, and situated close to the hills. This city has not been visited by any traveller in modern times, so we do not know what buildings it may contain. About the year 1350 the Siamese were successful in their wars with the Cambodians, and eventually succeeded in capturing their capital, Intha patha puri, or Indra prestha (Delhi), and practically annexing Cambodia to their kingdom.

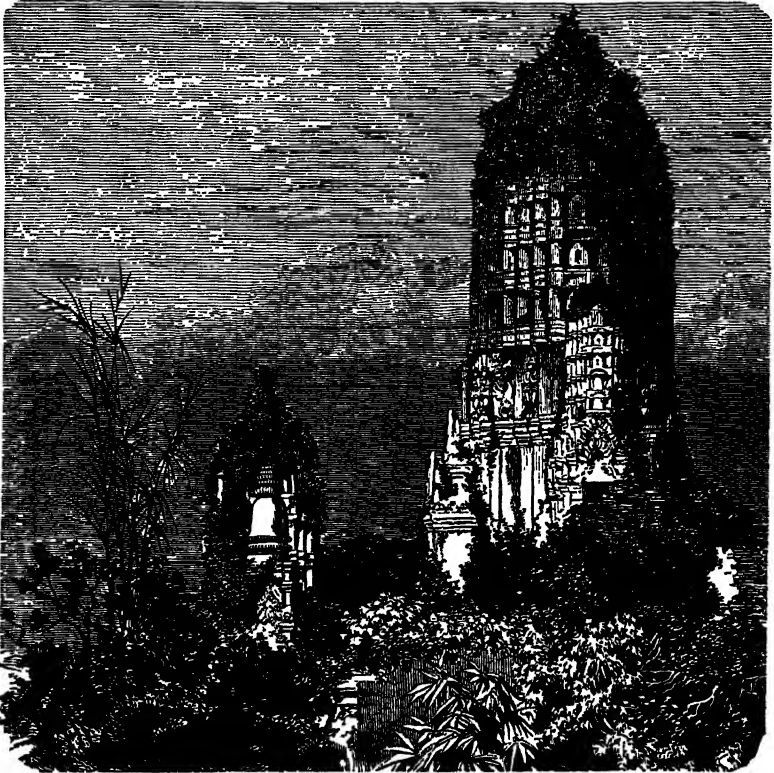
Having accomplished this, they moved their capital down to Ayuthia, a little more than fifty miles from the sea; and three centuries afterwards Bangkok succeeded it, and is now the capital. It is by no means certain whether this migration downwards was caused by political events and increasing commerce, or from the country gradually becoming drier and more fit for human habitation. Judging from what happened in Bengal in historical times, I should fancy it was the latter.

In India we find civilized nations first established in the Punjab and on the watershed between the Sutlej and the Jumna. Between 2000 and 3000 years B.C. Oude seems to have become dry enough for human habitation, and Ayodhya¹ (from which the Siamese capital took its name) became the chief city. Between 1000 and 500 B.C. Junakpore on the north, and Rajagriha on the south, were the capital cities of Bengal; but both being situated on the hills, it was not till Asoka's time (250 B.C.) that Patna on the Soane and Vaisali on the Gunduck, became capitals; and still another 1000 years elapsed before Gaur Dacca and became important, while Moorshedabad, Hooghly, and

¹The Siamese invariably change the Indian *d* into *th*.

Calcutta, are cities of yesterday.¹ The same phenomenon seems to have occurred in Siam, and, what is of still more interest, as we shall presently see, in Cambodia.

As Ayuthia was for three centuries the flourishing capital of one of the great building races of the world, we should, of course, look for considerable magnificence having been displayed in its architecture. From the accounts of the early Portuguese and Dutch travellers who



Ruins of a Pagoda at Ayuthia.

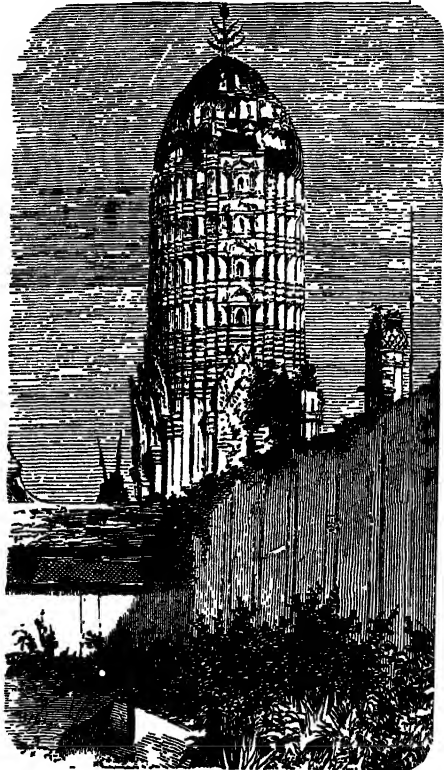
visited it in the days of its glory, it seems to have merited the title they bestowed upon it of the "Venice of the East," and the remains justify their eulogiums. The buildings, however, seem to have been principally constructed of brick and wood; and as the city has now been practically deserted for more than a century, the wild fig-trees

¹ For the particulars of this desiccation of the Valley of the Ganges, see the 'Journal of the Geological Society,' April, 1863.

have everywhere inserted their roots into the masonry, and decay has progressed rapidly among the wooden erections. As described by recent visitors, nothing can be more wildly picturesque than this once splendid city, now overgrown with jungle; but such a stage of decay is, of all conditions, the least favourable to the researches of the antiquary.

The form which the older pagodas took at Ayuthia differs in many essential respects from those which we find either in India or in Burmah. The top or upper part has a rounded domical shape, which we can easily fancy to be derived from the tope, but the upright part looks more like the sikra of a Hindu temple than anything Buddhist. If we had a few earlier examples, perhaps we might trace the steps by which the one passed into the other; at present the gaps in the series are too great to be bridged over with anything approaching certainty. One link, however, seems to be supplied by the temples of Nakhon Wat in Cambodia, of which more hereafter.

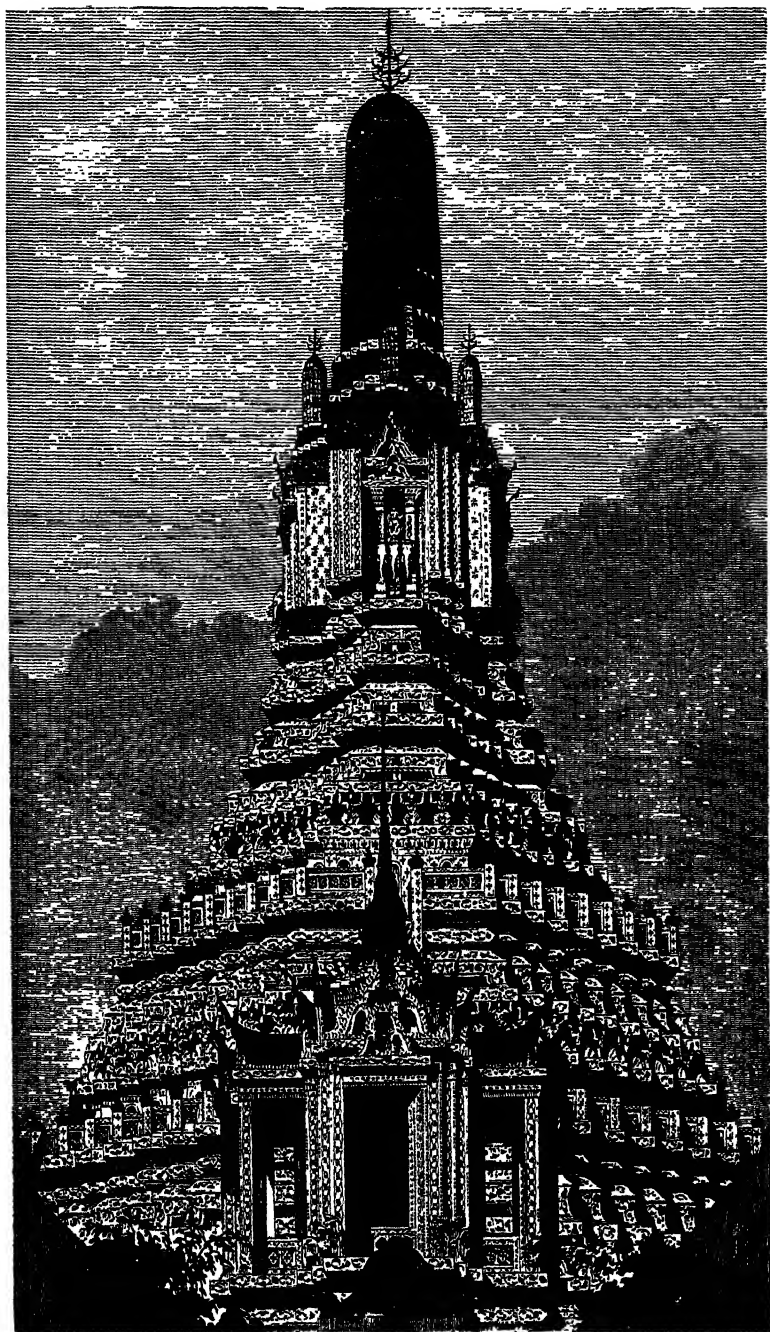
The same outline is found in the crowning members of the pagodas of Bangkok, but they are covered with an elaboration of detail and exuberance



359. Ruins of a Pagoda at Ayuthia. (From Mouhot.)

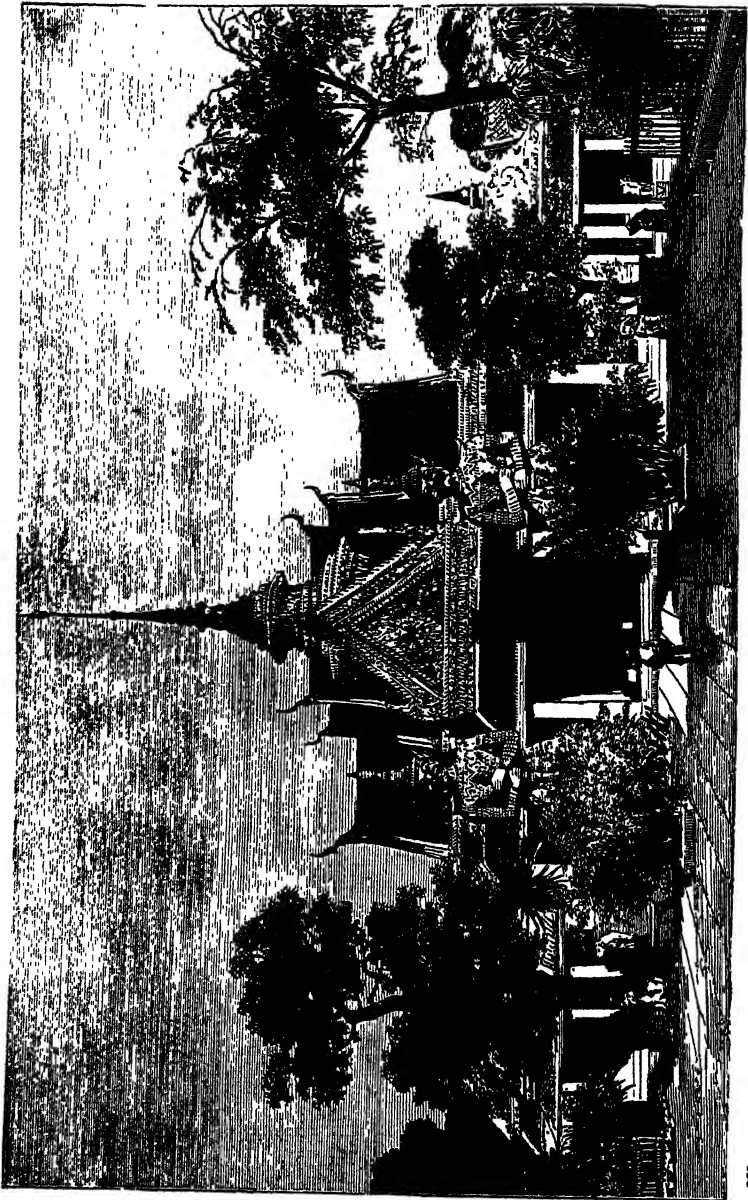
of coloured ornament that has seldom been surpassed, nor is it desirable it should be, for it is here carried to an extent truly barbarous (Woodcut No. 360).

Notwithstanding the bad taste which they display, these Bangkok pagodas are interesting in the history of architecture as exemplifying the instinctive mode in which some races build, and the innate and irrepressible love of architecture they display. But it also shows how easily these higher aspirations degenerate into something very



360. The Great Tower of the Pagoda Wat-ching at Bangkok. (From Mouhot.)

like vulgarity, when exercised by a people in so low a stage of civilization as the modern Siamese.



Hall of Audience at Bangkok. (From Monhot.)

361.

The same remarks apply to their civic buildings: palaces and porticoes, and even dwelling-houses, are all as rich as carving and

gilding, and painting, can make them: but, as in the pagodas, it is overdone, and fails to please, because it verges on vulgarity.

The typical design of all these halls and minor buildings will be understood from the preceding woodcut, representing the Hall of Audience at Bangkok. Like all the others, it has two roofs intersecting one another at right angles, and a spire of greater or less elevation on the intersection. Sometimes one, two, or three smaller gables are placed in front of the first, each lower than the one behind it, so as to give a pyramidal effect to the whole. Generally, the subordinate gables are of the same width as those in the centre: but sometimes the outer one is smaller, forming a porch. In the audience hall just quoted there are three gables each way. These may be seen on the right and left of the central spire in the view, but the first and second towards the front are hidden by the outer gable. The point of sight being taken exactly in front, it looks in the view as if there were only one in that direction.

The Burmese adopt the same arrangement in their civil buildings, and in Siam and Burmah the varieties are infinite, from the simple pavilion with four gables, supported on four pillars,¹ to those with twelve and sixteen gables, combined with a greater complication of walls and pillars for their support.

As the Siamese are certainly advancing in civilization, it may be asked, Will not their architecture be improved and purified by the process? The answer is, unfortunately, too easy. The new civilization is not indigenous, but an importation. The men of progress wear hats, the ladies crinolines, and they build palaces with Corinthian porticos and sash-windows. It is the sort of civilization that is found in the Bazar in Calcutta, and it is not desirable, in an architectural point of view, at all events, if, indeed, it is so in any other respect.

¹ This form is interesting to us as it is that adopted for the Albert Memorial in Hyde Park, the style of decoration of which is also much more like that employed in Siam than anything yet attempted out of doors in Europe.

CHAPTER III.

JAVA.

CONTENTS.

History—Boro Buddor—Temples at Mendoet and Brambanam—Tree and Serpent Temples—Temples at Djeing and Suku.

THERE is no chapter in the whole history of Eastern art so full of apparent anomalies, or which so completely upsets our preconceived ideas of things as they ought to be, as that which treats of the architectural history of the island of Java. In the Introduction, it was stated that the leading phenomenon in the history of India was the continued influx of race after race across the Indus into her fertile plain, but that no reflex wave had ever returned to redress the balance.¹ This seems absolutely true as regards the west, and practically so in reference to the north, or the neighbouring countries on the east. Thibet and Burmah received their religion from India, not, however, either by conquest or colonisation, but by missionaries sent to instruct and convert. This also is true of Ceylon, and partially so at least of Cambodia. These countries being all easily accessible by land, or a very short sea passage, it is there that we might look for migrations, if any ever took place, but it is not so. The one country to which they overflowed was Java, and there they colonised to such an extent as for nearly 1000 years to obliterate the native arts and civilization, and supplant it by their own. What is still more singular is, that it was not from the nearest shores of India that these emigrants departed, but from the western coast. We have always been led to believe that the Indians hated the sea, and dreaded long sea voyages, yet it seems almost certain that the colonists of Java came *not from the valley of the Ganges, but from that of the Indus*, and passed round Ceylon in thousands and tens of thousands on their way to their distant sea-girt home. The solution of this difficulty may perhaps be found in the suggestion that the colonists were not Indians after all, in the sense in which we usually understand the term, but nations from the north-west—the inhabitants in fact of

¹ "As for the Indian kings none of country, lest they should be deemed them ever led an army out of India to guilty of injustice."—Arrian, 'Indica,' attempt the conquest of any other ch. ix.

Gandhara and Cambodia, who, finding no room for new settlements in India Proper, turning to their right, passed down the Indus, and sought a distant home on this Pearl of Islands.

Whoever they were, they carried with them the bad habit of all their cognate races, of writing nothing, so that we have practically no authentic written record of the settlement and of its subsequent history, and were it not that they made up for this deficiency to a great extent by their innate love of building, we should hardly know of their existence in the island. They did, however, build and carve, with an energy and to an extent nowhere surpassed in their native lands, and have dignified their new home with imperishable records of their art and civilization—records that will be easily read and understood, so soon as any one will take the trouble to devote to them the attention with which they deserve to be studied.

It has been said, and not without reason, that the English did more for the elucidation of the arts and history of Java during the five years they held the island (1811 to 1816) than the Dutch had done during the previous two centuries they had practically been in possession. The work of the governor, Sir Stamford Raffles, is a model of zealous energy and critical acumen, such as is rarely to be found of its class in the English language, and is the storehouse from which the bulk of our knowledge of the subject must still be derived. His efforts in this direction were well seconded by two Scotchmen, who took up the cause with almost equal zeal. One of these, John Crawfurd, noted down everything he came across with patient industry, and accumulated vast stores of information—but he could not draw, and knew nothing of architecture or the other arts, with which he had no sympathy. The other, Colin Mackenzie—afterwards Surveyor-General of India—drew everything he found of any architectural importance, and was the most industrious and successful collector of drawings and manuscripts that India has ever known; but he could not write. The few essays he attempted are meagre in the extreme, and nine-tenths of his knowledge perished with him. Had these two men been able to work together to the end, they would have left little for future investigation. There was, however, still a fourth labourer in the field—Dr. John Leyden—who, had his life been spared, could have easily assimilated the work of his colleagues, and with his own marvellous genius for acquiring languages and knowledge of all sorts, would certainly have lifted the veil that now shrouds so much of Javan history in darkness, and left very little to be desired in this respect. He died, however, almost before his work was begun, and the time was too short, and the task too new, for the others to do all that with more leisure and better preparation they might have accomplished.

During the last sixty years the Dutch have done a good deal to redeem the neglect of the previous centuries, but, as has happened in the sister island of Ceylon, it has been without system, and no master mind has arisen to give unity to the whole, or to extract from what is done the essence, which is all the public care to possess. The Dutch Government have, however, published, in four great folio volumes, 400 plates, from Mr. Wilsen's drawings, of the architecture and sculptures of Boro Buddor; and the Batavian Society¹ have published sixty-five photographic plates of the same monument; and as Dr. Leemans of Leyden has added a volume of text, historical and descriptive, there is no monument in the East so fully and so well illustrated as this one, and probably none that better deserves the pains that have been bestowed upon it.² The same Society have also published 332 photographs of other Javan antiquities and temples, but, unfortunately, for the most part without any accompanying text. A thoroughly well qualified antiquary, Heer Brumund, was employed to visit the localities, and write descriptions, but unfortunately he died before his task was half complete. A fragment of his work is published in the 33rd volume of the 'Transactions' of the Society, but it is only a fragment, and just sufficient to make us long for more. At the same time an Oriental scholar, Dr. Friederich, was employed by Government to translate the numerous inscriptions that abound in the island, and which, without doubt, would explain away all the difficulties in the history of the island and its monuments. Some of these were published in the 26th volume of the 'Verhandelingen' in 1856, and more were promised, but ill-health and accidents have hitherto prevented this being done, and if he should happen to die before publishing the results, the accumulations of half a century may perish with him.

From the above it may be gathered that a considerable amount of information exists in English and Dutch publications regarding the antiquities of Java, but it is *rudis indigestaque moles*—descriptions without illustration, and drawings and photographs without description, very few plans, and, except for Boro Buddor, very few architectural details; no statistical account, and no maps on which all the places can be recognised. It is provoking to think when so much has been done, how little more is required to bring order out of chaos, and fuse the whole into one of the most interesting and most easily intelligible chapters of architectural history.

¹ Bataviansch Genootschap van Kunsten en Wetenschappen.' They have done me the honour of electing me an honorary member of their Society—an honour I feel all the more as it was

quite unsolicited and unexpected.

² There are twelve plates illustrating the same monument in Sir Stamford Raffles' 'History of Java.'

HISTORY.

Amidst the confusion of their annals, it is rather fortunate that the Javans make no claim to more remote political history than the fabled arrival in the island of Adji Saka, the founder of the Saka era of the Buddhists, in A.D. 79. It is true that in the 8th or 9th century they obtained an abridged translation of the 'Mahabharata,' and, under the title of the 'Brata Yudha,' adopted it as a part of their own history, assigning sites on the island for all the principal scenes of that celebrated struggle which took place in the neighbourhood of Delhi and Hastinapura, adding only their own favourite Gendara Desa (Gandhara), to which they assigned a locality on the north of the island.¹ It is thus, unfortunately, that history is written in the East, and because it is so written, the Javans next thought it necessary to bring Salivahana, the founder of the Saka era, to their island also. Having, as Buddhists, adopted his era, their childish vanity required his presence there, but as it is certain he never saw the island, his visit is fabled to have resulted in failure, and said to have left no traces of his presence.

The next person who appears on the scene is one of the most mysterious in Indian history. In the annals of Siam,² of Cambodia,³ of Java,⁴ and at Amravati,⁵ a prince of Rom, or Rum, coming from Taxila, plays a most important part, but without apparently any very permanent result. Nowhere is his name given, nor any particulars; most probably it is only a reminiscence of King Commerce. Nothing is more likely than that the ships of the Roman or Byzantine emperors, with their disciplined crews, should have made an impression on the semi-civilized communities of these remote lands, and the memory be perpetuated in fabled exploits to modern times.⁶

Leaving these fabulous ages, we at last come to a tradition that seems to rest on a surer foundation. "In the year 525 (A.D. 603), it being foretold to a king of Kuj'rat, or Gujerat, that his country would decay and go to ruin, he resolved to send his son to Java. He embarked with about 5000 followers in six large and about 100 small vessels, and after a voyage of four months, reached an island they supposed to be Java; but finding themselves mistaken, re-embarked, and finally settled at Matarem, in the centre of the island they were

¹ Sir S. Raffles' 'History of Java,' pl. 24; text, vol. i. p. 465, 8vo. edition.

² 'Journal of the Asiatic Society of Bengal,' vol. xvii. pp. 86, 87.

³ Bastian, 'Die Völker der Oestlichen Asien,' vol. i. p. 393.

⁴ Sir S. Raffles, vol. ii. p. 73.

⁵ 'Journal of the Royal Asiatic

Society' (N.S.), vol. iii. p. 153.

⁶ There is little doubt that if the South Sea Islanders had at some distant epoch become civilized without European assistance, Captain Cook and the early explorers would have figured in their annals as English or French princes.

seeking." "The prince now found that men alone were wanting to make a great and flourishing state; he accordingly applied to Gujerat for assistance, when his father, delighted at his success, sent him a reinforcement of 2000 people." "From this period," adds the chronicle, "Java was known and celebrated as a kingdom; an extensive commerce was carried on with Gujerat and other countries, and the bay of Matarem was filled with adventurers from all parts."

During the sovereignty of this prince and his two immediate successors, "the country advanced in fame and prosperity. The city of Mendang Kumulan, since called Brambanan, increased in size and splendour: artists, particularly in stone and metals, arrived from distant countries, and temples, the ruins of which are still extant, were constructed both at this place and at Boro Buddor, in Kedu, during this period by artists invited from India."¹

All this is fully confirmed by an inscription found at Menankabu, in Sumatra, wherein a king, who styles himself Maha Raja Adiraja Adityadharma King of Prathama—the first or greatest Java—boasts of his conquests and prowess, and he proclaims himself a Buddhist, a worshipper of the five Dyani Buddhas, and records his having erected a great seven-storeyed vihara in honour of Buddha.² This inscription is dated fifty years later, or in A.D. 656, but its whole tone is so completely confirmatory of the traditions just quoted from Sir S. Raffles, that there seems little doubt the two refer to events occurring about the same time.

The only other event of importance in these early times bearing on our subject is Fa Hian's visit to the island in A.D. 414, on his way from Ceylon to China by sea. The more, however, I think of it, the more convinced I am that Java the Less, or Sumatra, was really the island he visited. It certainly was the Iadius, or Yavadwipa, of Ptolemy, and the Java the Less of the Arab geographers and of Marco Polo;³ and all the circumstances of the voyage seem to point rather to this island than to Java proper. His testimony is, however, valuable, as they seem to have been united under one emperor in A.D. 656, and may have been so two centuries earlier. "In this country," he says, "Heretics and Brahmans flourish; but the Law of Buddha is not much known."⁴ As he resided there five months, and had been fourteen years in India, he knew perfectly what he was speaking about.

¹ Sir S. Raffles' 'History of Java,' vol. ii., 8vo. édition, p. 87, *et seqq.*

² I am perfectly aware that this is not borne out by the translation of this inscription given by Dr. Friederich in vol. xxvi. of the 'Verhandelingen;' but being dissatisfied with its unmeaningness, I

took it to my friend, Professor Eggeling, who is perhaps a better Sanscrit scholar than Friederich, and he fully confirms my view as above expressed.

³ Yule's 'Marco Polo,' vol. ii. p. 264, *et seqq.*

⁴ Beal's translation, p. 169.

That there were Brahmans in these islands before the advent of the Buddhist emigrants in the 7th century seems more than probable from the traditions about Tritrésta collected by Sir S. Raffles¹ and others; but, if so, they were Aryan Brahmans, belonging to some of the non-building races, who may have gone there as missionaries, seeking converts, but hardly as colonists or conquerors. Indeed, all over the island circles of stone are found, either wholly unfashioned or carved into rude representations of Hindu deities—so rude that even Ganesa can hardly sometimes be recognised; and it frequently requires an almost Hindu trustfulness to believe that these rude stones sometimes represent even Siva and Vishnu and other gods of the Hindu Pantheon.² It seems as if the early Brahmans tried to teach their native converts to fashion gods for themselves, but, having no artistic knowledge of their own to communicate, failed miserably in the attempt. The Buddhists, on the contrary, were artists, and came in such numbers that they were able to dispense with native assistance, nearly if not altogether.

The next recorded event that seems to bear on our investigations is the mission of the children of Dewa Kusuma to Kling or India, in order that they might be educated in the Brahmanical religion.³ This event took place in A.D. 924, and seems to point distinctly to a time when the Buddhist religion, as evidenced by the erection of Boro Buddor, had died out, and the quasi-Hindu temples of Brambanam and Singa Sari had superseded those of the Buddhists. Those at Brambanam are said to have been completed in A.D. 1097, which seems an extremely probable date for the Chandi Sewa, or “1000 temples,” which, however, are much more Jaina than Hindu. From that period till the beginning of the 15th century, the series of monuments—many of them with dates upon them⁴—are tolerably complete, and there will be no difficulty in classifying them whenever the task is fairly undertaken.

At this time we find the island divided into two kingdoms; one, having its capital at Pajajaram, about forty miles east of Batavia, occupied the whole of the western or Sunda part of the island. The Sundas, however, were not a building race, and the portion occupied

¹ Raffles, vol. ii. p. 77, *et seqq.*

² About half of the photographs of the Batavian Society are filled with representations of these rude deities, which resemble more the images of Easter Island than anything Indian.

³ Raffles, ‘History of Java,’ vol. ii. p. 98.

⁴ The compilers of the catalogue of

the photographs of the Batavian Society use 53 instead of 78 or 79 as the factor for converting Saka dates into those of the Christian Era. As, however, they give no reason for this, and Brumund, Leemans and all the best modern authors use the Indian index, it is here adhered to throughout.

by them need not be again referred to here. It contains no buildings except the rude Hindu remains above referred to.

The eastern portion of the island was occupied by the kingdom of Majapahit, founded, apparently, about the year 1300. It soon rose to a higher pitch of power and splendour than any of the preceding kingdoms, and the capital was adorned with edifices of surpassing magnificence, but mostly in brick, so that now they are little more than a mass of indistinguishable ruins. When, however, it had lasted little more than a century, Mahomedan missionaries appeared on the island, and gradually—not by conquest or the sword, but by persuasion—induced the inhabitants of the island to forsake the religion of their forefathers and adopt that of the Arabian Prophet. In the year 1479 the Mahomedans had become so powerful that the city of Majapahit was taken by them by storm, and the last Hindu dynasty of the island overthrown, and those that remained of the foreign race driven to take refuge in the island of Bali.¹

Then occurred what was, perhaps, the least-expected event in all “this strange eventful history.” It is as if the masons had thrown away their tools, and the chisels had dropped from the hands of the carvers. From that time forward no building was erected in Java, and no image carved, that is worth even a passing notice. At a time when the Mahomedans were adorning India with monuments of surpassing magnificence no one in Java thought of building either a mosque, or a tomb, or a palace that would be deemed respectable in any second-class state in any part of the world.

For nearly nine centuries (A.D. 603–1479) foreign colonists had persevered in adorning the island with edifices almost unrivalled elsewhere of their class; but at the end of that time, as happened so often in India, their blood had become diluted, their race impure, their energy effete, and, as if at the touch of a magician’s wand, they disappear. The inartistic native races resumed their sway, and art vanished from the land, never, probably, again to reappear.

BORO BUDDOR.

There may be older monuments in the island of Java than Boro Buddor, but, if so, they have not yet been brought to light. The rude stone monuments of the western or Sunda end of the island may, of course, be older, though I doubt it; but they are not architectural, and of real native art we know nothing.

When Sir S. Raffles and J. Crawfurd wrote their works, 110

¹ These latter dates are taken from perfectly well ascertained, no reference Raffles and Crawfurd, but as they are seems needful.

means existed of verifying dates by comparison of styles, and it is, therefore, little to be wondered at if the first gives A.D. 1360,¹ and the second A.D. 1344,² as the date of this building. The former, however, was not deceived by this date, inasmuch as at page 67 he says, "The edifices at Singa Sari were probably executed in the 8th or 9th century. They nearly resemble those of Brambanam and Boro Buddor. It is probable the whole were constructed about the same period, or within the same century; at any rate, between the sixth and ninth century of the Christian Era." This, perhaps, errs a little the other way. Heer Brumund, on historical grounds, places Boro Buddor "in the ninth, perhaps even in the eighth century of the Christian Era."³ On architectural grounds I would almost unhesitatingly place it a century earlier. The style and character of its sculptures are so nearly identical with those of the latest caves at Ajunta (No. 26, for instance), and in the western Ghâts, that they look as if they were executed by the same artists, and it is difficult to conceive any great interval of time elapsing between the execution of the two. If I am correct in placing the caves in the first half of the 7th century, we can hardly be far wrong in assigning the commencement, at least, of the Javan monument to the second half of that century. This being so, I am very much inclined to believe that Boro Buddor may be the identical seven-storeyed vihara, mentioned by Aditya Dharma in his inscription at Menankabu.⁴ Its being found in Sumatra does not appear to me to militate against this view. Asoka's inscriptions are found in Gandhara, Saurashtra, and Orissa, but not in Behar. At home he was known: but it may be that he desired to place a permanent record of his greatness in the remote portions of his dominions. The date of the inscription, A.D. 656, accords so exactly with the age I would assign to it from other sources, that it may at least stand for the present. Of course, it was not completed at once, or in a few years. The whole group, with Chandi Pawon and Mendout, may probably extend over a century and a half—down, say, to A.D. 800, or over the whole golden age of Buddhism in the island.

It certainly is fortunate for the student of Buddhist art in India that Boro Buddor (Woodcuts Nos. 362 and 363) has attracted so much attention; for, even now, the five folio volumes of plates recently devoted to its illustration do not contain one figure too many for the

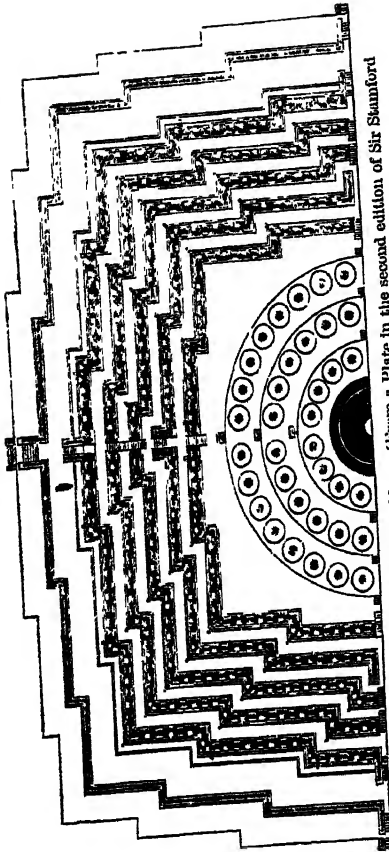
¹ 'History of Java,' vol. ii. p. 85.

² 'Dictionary of Indian Archipelago,' p. 66.

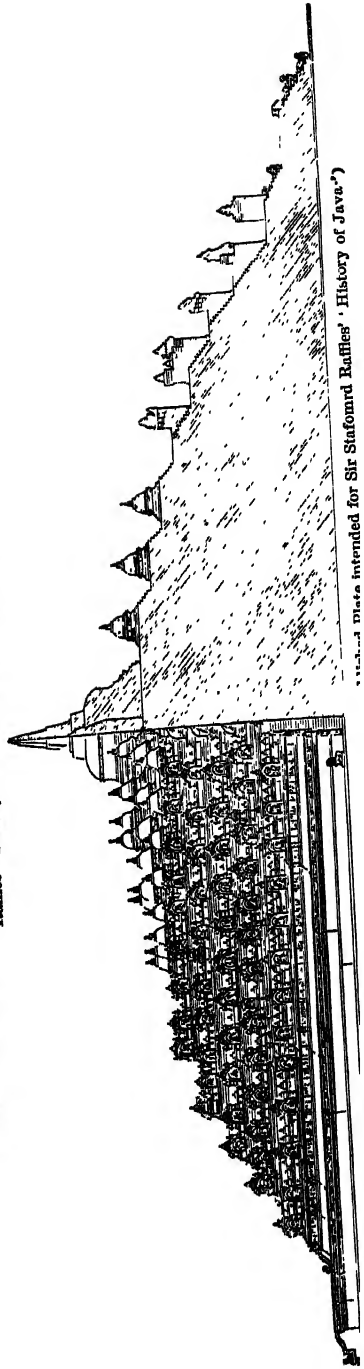
³ 'Boro Boudour,' par Dr. C. Leemans. Leyden, 1874, p. 536. I quote from the French translation, having lent my original Dutch copy to Dr. Mayo

of New College, Oxford. It was inadvertently packed among his baggage when he went to Fiji.

⁴ *Ante*, p. 641. Also 'Verhandeligen,' &c., vol. xxvi. p. 31, *et seqq.* One of his inscriptions—the fourth—was found in Java proper.



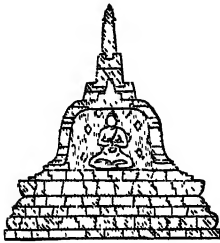
362. Half-plan of Temple of Borobudur. (From a Plate in the second edition of Sir Stamford Raffles' 'History of Java.') Scale 100 ft. 1 to in.



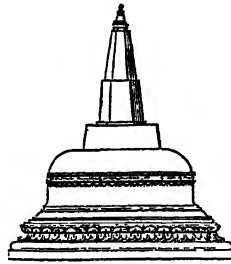
...and Plate intended for Sir Stamford Raffles' 'History of Java.')

purpose of rendering its peculiarities available for scientific purposes : the fact being that this monument was erected just at the time when the Buddhist system attained its greatest development, and just before its fall. It thus contains within itself a complete epitome of all we learn from other sources, and a perfect illustration of all we know of Buddhist art or ritual. The 1000 years were complete, and the story that opened upon us at Bharhut closes practically at Boro Buddor.

The fundamental formative idea of the Boro Buddor monument is that of a dagoba with five procession-paths. These, however, have become square in plan instead of circular ; and instead of one great domical building in the centre we have here seventy-two smaller ones, each containing the statue of a Buddha (Woodcut No. 364),



364. Section of one of the smaller Domes at Boro Buddor.



365. Elevation of principal Dome at Boro Buddor. (From Sir S. Raffles' 'History of Java'.)

visible through an open cage-like lattice-work ; and one larger one in the centre, which was quite solid externally (Woodcut No. 365), but had a cell in its centre, which may have contained a relic or some precious object. There is, however, no record of anything being found in it when it was broken into. All this is, of course, an immense development beyond anything we have hitherto met with, and a sort of half-way house between the majestic simplicity of the Abhayagiri at Anuradhapura, and the somewhat tawdry complexity of the pagoda at Mengûn (Woodcut No. 354).

With the idea of a dagoba, however, Boro Buddor also combines that of a vihara, such as that illustrated by Woodcuts Nos. 66, 67. There the cells, though only copied solid in the rock, still simulated the residences of the monks, and had not yet advanced to the stage we find in the Gandhara monasteries, where the cells of monks had become niches for statues. Here this is carried further than in any example found in India. The cells of the Mahavellipore example are here repeated on every face, but essentially as niches, and are occupied by 436 statues of Buddha, seated in the usual cross-legged attitude. In this respect Boro Buddor is in advance of the Takht-i-Bahi, which is the monument in India that most nearly approaches

to it in mythological significance. So great, indeed, is the similarity between the two, that whatever date we assign to the one drags with it that of the other. It would, indeed, be impossible to understand how, in the 7th century, Buddhism had been so far developed towards the modern Nepalese and Thibetan systems if we had not these Gandhara monasteries to fall back upon. On the other hand, having so similar a Buddhist development in Java in the 7th century, it seems difficult to separate the monuments of the north-west of India from it by any very long interval of time.

As will be observed from the plan and elevation (Woodcuts Nos. 362, 363, page 645), the monument may be described either as a seven or a nine-storeyed vihara, according as we reckon the platform on which the seventy-two small dagobas stand as one or three storeys. Its basement measures over 400 ft. across, but the real temple is only 300 ft. from angle to angle either way. It is not, however, either for its dimensions or the beauty of its architectural design that Boro Buddor is so remarkable, as for the sculptures that line its galleries. These extend to nearly 5000 ft.—almost an English mile—and as there are sculptures on both faces, we have nearly 10,000 lineal ft. of bas-reliefs; or, if we like to add those which are in two storeys, we have a series of sculptures, which, if arranged consecutively in a row, would extend over nearly three miles of ground. Most of them, too, are singularly well preserved; for when the Javans were converted to Mahomedanism it was not in anger, and they were not urged to destroy what they had before revered; they merely neglected them, and, except for earthquakes, these monuments would now be nearly as perfect as when first erected.

The outer face of the basement, though extremely rich in architectural ornaments and figure-sculptures, is of comparatively little historical importance. The first enclosed—or, as the Dutch call it, the second—gallery is, of all the five, the most interesting historically. On its inner wall the whole life of Sakya Muni is portrayed in 120 bas-reliefs of the most elaborate character. The first twenty-four of these are occupied with scenes in the Tusita heavens, or events that took place before the birth. In the twenty-fifth we have Maya's dream, depicted exactly as it is at Bharhut or Sanchi, 700 or 800 years earlier. In the following sculptures it is easy to recognise all the familiar scenes of his life, his marriage, and domestic happiness, till he meets the four predictive signs; his subsequent departure from home, and assumption of the ascetic garb; his life in the forest; his preaching in the Deer-garden at Benares—the whole *Lalita Vestara*, in short, portrayed, with very few variations from the pictures we already possess from Gandhara to Amravati, with this singular exception: in all Indian examples the birth and the Nirvana are more frequently repeated than any other events; for

some reason, not easily guessed, they are omitted here, though all the events that preceded and followed them are minutely detailed.¹ Below these bas-reliefs depicting the life of Buddha is an equally extensive series of 120 bas-reliefs of subjects taken from the Jataka, all of which might, no doubt, be easily identified, though this has not yet been attempted.

In the three galleries above this Buddhism is represented as a religion. Groups of Buddhas—three, five or nine—are repeated over and over again, mixed with Bodhisatwas and saints of all sorts. Among these, the five Dhyani Buddhas are conspicuous in all, perhaps more than all, the variety of manifestations which are known in Nepal and Thibet,² which, as Lassen points out, almost inevitably leads to the conclusion that this form of faith was introduced from Nepal or Western Thibet.³

Whether this is exactly so or not, no one probably who is familiar with Buddhist art in its latest age on the western side of India will probably doubt that it was from these parts that the builders of Boro Buddor migrated. The character of the sculptures, and the details of the ornamentation in cave 26 at Ajunta, and 17 at Nassick, and more especially in the later caves at Salsette, at Kondoty, Montpezir, and other places in that neighbourhood, are so nearly identical with what is found in the Javan monument, that the identity of the workmen and workmanship is unmistakeable. It is true we have no monument in that part of India to which we can point that at all resembles Boro Buddor in design, but then it must be borne in mind that there is not a single structural Buddhist building now existing within the limits of the cave region of Western India. It seems absurd, however, to suppose that so vast a community confined themselves to caves, and caves only. They must have had structural buildings of some sort in their towns and elsewhere, but not one fragment of any such now exists, and we are forced to go to Gandhara, in the extreme north-west, for our nearest examples. As already pointed out, there are many points of similarity between Jamalgiri, and more especially between Takht-i-Bahi and Boro Buddor; and if any architect, who was accustomed to such work, would carefully draw and restore these northern monasteries, many more might become apparent.⁴ We know

¹ All these, or nearly all, have been identified by Dr. Leemans in the text that accompanies the plates.

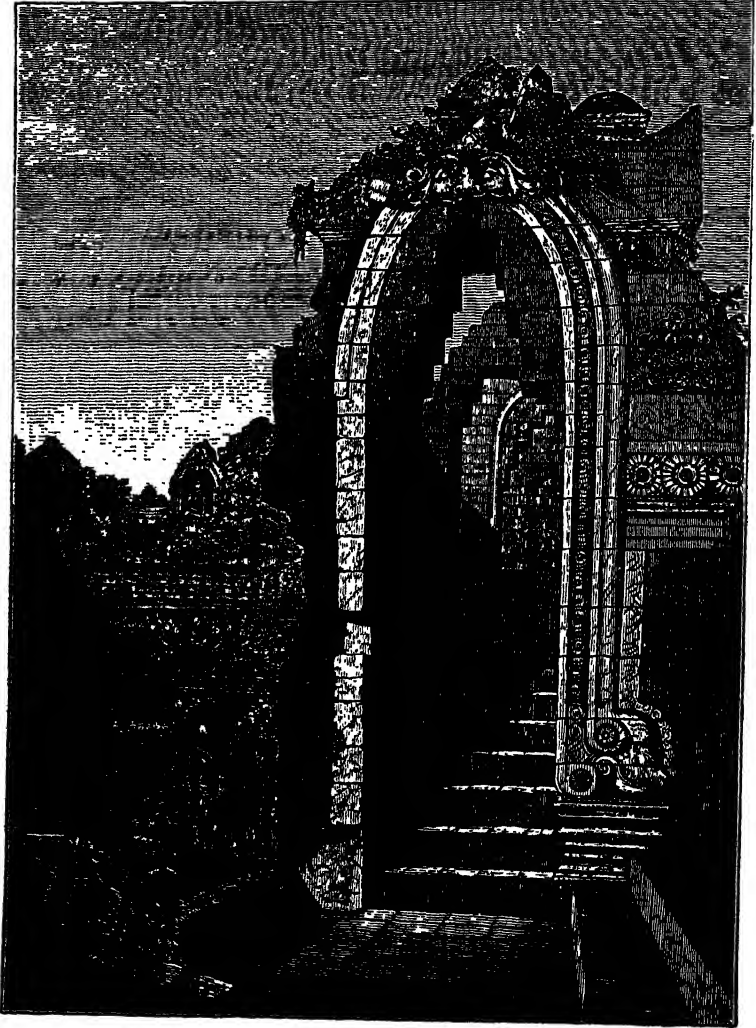
² If Brian Hodgson would attempt it, he perhaps alone could explain all this vast and bewildering mythology. At present our means of identification is almost wholly confined to his representation in the second volume of the 'Transactions' of the Royal Asiatic Society,

plates 1-4, and to the very inferior work of Schlagintweit, 'Buddhismus in Thibet.'

³ 'Indische Alterthumskunde, vol. iv. p. 467.

⁴ General Cunningham's drawings, though nearly sufficient for anyone as familiar with all the styles as I have become, are not enough for anyone who is a stranger to the subject. I do not,

enough even now to render this morally certain, though hardly sufficient to prove it in the face of much that may be brought forward by those who care to doubt it. Meanwhile, my impression is, that if we knew as much of these Gandhara monasteries as we know of Boro



366. View of Central Entrance and Stairs at Boro Buddor. (From a Lithographic Plate.)

Buddor, we could tell the interval of time that separated them, probably within half a century at least.

indeed, know any Englishman who has the knowledge, combined with the powers of drawing, to be entrusted with this task. A Frenchman might be found who could do it, if he would be content to restrain his imagination.

Stretching such evidence as we at present have, as far as it will bear, we can hardly bring the Taklit-i-Bahi monastery within one century of Boro Buddor. It may be two—and Jamalgiri is still one or two centuries more distant in time. But, on the other hand, if we had not these Gandhara monasteries to refer to, it would be difficult to believe that the northern system of Buddhism could have been so completely developed, even in the 8th century, as we find it at Boro Buddor. It is this wonderful progress that has hitherto made the more modern date of that monument probable—it looks so much in advance of anything we know of in Indian Buddhism. But all this we must now revise by the light these Javan monuments throw on the subject.

Being merely a pyramid, situated on the summit of a hill, there were no constructive difficulties encountered in the erection of Boro Buddor, and it is consequently no wonder that it now remains so entire, in spite of its being, like all Javan buildings, erected wholly without mortar. It is curious to observe, however, how faithfully its architects adhered to the Indian superstition regarding arches. They did not even think it necessary to cut off the angles of the corbel-stones, so as to simulate an arch, though using the pointed-arched forms of the old chaitya caves of the west. The two systems are well exemplified in the preceding Woodcut (No. 366), but it runs throughout. All the niches are surmounted by arch forms—circular, elliptical, or pointed—but all are constructed horizontally, and it may be added that, in nine cases out of ten, the keystones are adorned with a mask, as in this last example.

MENDOET.

At a place called Mendoet, about two and a half miles from Boro Buddor, there is a temple of a very different class, which, though small, is of extreme interest for the history of Javan architecture. It stands on a basement 70 ft. square, and 15 ft. to 16 ft. high. The temple itself is about 45 ft. square, including a projection on each face, which gives it a slightly cruciform shape. Inside is a cell, about 20 ft. square, roofed by an inverted pyramid of steps, in which are three colossal images seated, and about 11 ft. high each. The central one is Buddha, curly headed of course, and clad in a diaphanous robe.¹ The two other colossi, though having only two arms each, are almost certainly intended for Vishnu and Siva. On one of the faces, exter-

¹ Col. Yule, from whose account most of these particulars are taken ('Journal of the Asiatic Society of Bengal,' 1862), calls it "nearly naked;" but a drawing by Wilsen ('Verhandelingen,' vol. xix. p. 166) I think settles the question, that he is intended to be represented as clothed.

nally, is Laksmi, eight-armed, seated on a lotus, with attendants. On another face is a figure, four-armed, seated cross-legged on a lotus, the stem of which is supported by two figures with seven-headed snake-hoods. It is in fact a slightly altered repetition of a group inserted among the older sculptures on the façade of the cave at Karli.¹ That insertion I have always believed to be of the 6th or 7th century; this group is certainly slightly more modern. The curious part of the matter is, that the Mendoet example is so very much more refined and perfect than that at Karli. The one seems the feeble effort of an expiring art; the Javan example is as refined and elegant as anything in the best ages of Indian sculpture. The same remarks apply to the sacred tree under which the figure is seated. Like all the similar conventional trees at Boro Buddor, they are complicated and refined beyond any examples known in India.

The great interest, however, of this little temple arises from the fact that it almost certainly succeeded immediately to Boro Buddor. If it is correct to assume A.D. 650–750 as the period during which that temple was erected, this one must have been built between A.D. 750 and A.D. 800. It shows, too, a progress in design at a time when Buddhist art in India was marked by decay; and it exhibits such progress in mythology, that though there can be no doubt as to the purity of the Buddhism of Boro Buddor, anyone might fairly argue that this temple belonged either to that religion or to Hinduism. It is in fact one of those compromises that in India would be called Jaina; in other words, one of those transitional examples of which we have many in Java, but the want of which leaves such a gap in our history of architecture in India.

BRAMBANAM.

At a distance of twenty miles south-east from Boro Buddor is a group of temples, marking the site of the old Hindu capital of the island, which are almost as interesting as that great temple itself. They are unfortunately much less known, or, at all events, have not been illustrated to anything like the same extent. They are, however, so much more ruined, that it may be owing to this that their details have not been so completely made out; but from whatever cause, we cannot speak of them with the same confidence as of Boro Buddor.

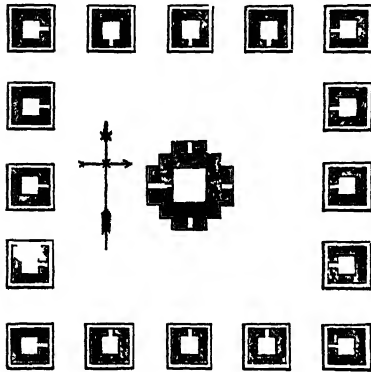
The oldest group at Brambanam seems to be that known as Loro Jonggram, consisting of six larger temples, enclosed in a wall, and surrounded by fourteen smaller cells.² They may be of the age of Deva

¹ An imperfect representation of this sculpture will be found in the 'Journal of the Asiatic Society of Bengal,' vol. vi. plate 53.

² Sir S. Raffles' 'History of Java,' vol. ii. plate 32.

Kosuma, or of the beginning of the 9th century, and possibly are not the earliest Hindu temples here, but till we have more illustrations it is impossible to speak of this with confidence.

The great interest of the place centres in a temple known as the Chandi Siwa, or, "thousand temples," which is, or was, when complete, only second to Boro Buddor in interest. The general character of the great temple will be understood from the annexed plan of a smaller one at the same place (Woodcut No. 367). Both consist of a central



367. Small Temple at Brambanam.
(From a Drawing at the India Office.)
No scale.

temple, surrounded by a number of smaller detached cells. In this instance there are only sixteen such, each of which is supposed to have contained an image — Buddha — Jaina, or Saiva, according to the dedication of the central cell.

In the great temple the central cell measured 45 ft. each way, and with the four attached cells, one of which served as an entrance porch, it formed a cross 90 ft. each way, the whole being raised on a richly ornamented square base. This

building is richly and elaborately ornamented with carving, but with a singular absence of figure-sculpture, which renders its dedication not easy to be made out; but the most remarkable feature of the whole group is the multitude of smaller temples which surround the central one, 238 in number. Immediately beyond the square terrace which supports the central temple stand twenty-eight of these—a square of eight on each side, counting the angular ones both ways. Beyond these, at a distance of 35 ft., is the second square, forty-four in number; between this and the next row is a wide space of above 80 ft., in which there are only six temples, two in the centre of the north and south faces, and one on each of the others. The two outer rows of temples are situated close to one another, back to back, and are 160 in number, and form a square, each face of which is about 525 ft. All these 238 temples are similar to one another, about 12 ft. square at the base, and 22 ft. high,¹

¹ The information here given is taken from Sir Stamford Raffles' 'History of Java,' second edition, vol. ii. p. 17, *et seqq.* His plans, however, do not quite agree with the measurements in the text, a

mistake arising, I believe, from the scales in the original drawings—now before me—being in Rheinland rods, which are not always converted into English feet.

all richly carved and ornamented, and in every one is a small square cell, in which was originally placed a cross-legged figure, probably of one of the Jaina saints, though the drawings which have been hitherto published do not enable us to determine whom they represent—the draughtsmen not being aware of the distinction between Buddhist and Jaina images.

When looked a little closely into, it is evident that the Chandi Siwa is neither more nor less than Boro Buddor taken to pieces, and spread out, with such modifications as were necessary to adapt it to that compromise between Buddhism and Brahmanism which we call Jaina.

Instead of a central dagoba, with its seventy-two subordinate ones, and its five procession-paths, with their 436 niches containing figures of Buddha, we have here a central cell, with four subordinate ones, each containing no doubt similar images, and surrounding these 236 cells, containing images arranged in five rows, with paths between, but not joined together with sculpture-bearing screens, as in the earlier examples, nor joined side by side with the sculpture on their fronts, or inside, as was invariably the case in similar temples in Gujerat of the same age.

Sir Stamford Raffles states A.D. 1098¹ for the completion of this temple which, from the internal evidence, I fancy cannot be far from the truth. It would, however, be extremely interesting if it could be fixed with certainty, as these Javan monuments will probably be found to be the only means we have of bridging over the dark ages in India. Already we can see that Takht-i-Bahi, Boro Buddor, and Chandi Siwa form landmarks in a series extending over at least 500 years, which we may hope some day to fill up, though the materials for it do not at present exist. We have not even correct drawings of the pickle-bottle-like cells of the Gandhara monasteries, and those at Chandi Siwa are so ruined, that it is difficult to make out their form. It seems, however, quite clear that they, with the domes and spires that crown the cells of the Boro Buddor façade, form parts of one connected series. They are, in fact, merely developments of one form which, with a little information, it would be very easy to trace back to its original source.

TREE AND SERPENT TEMPLES.

There is still another class of temples in Java which, when properly investigated, promises to throw great light on some vexed questions of Indian mythology and art. They are found principally in the

¹ 'History of Java,' vol. ii. p. 85. Crawford makes it 1266 to 1296; but no confidence can be placed on his dates for buildings.

provinces of Kediri and Malang, in the eastern part of the island, and, from dates on some of them, seem to be among the most modern examples of Javan art, all hitherto known being dated in the century preceding the overthrow of Majapahit in A.D. 1479.

Four of these are described by Heer Brumund,¹ but only one, so far as I know, that of Panataram in Kediri, has been photographed, and no plans or architectural details of any have yet been published. It is consequently difficult to speak with certainty regarding them, but they are too interesting to be passed over in silence. The annexed woodcut will convey some idea of that at Panataram, though necessarily on too small a scale to render all its details recognisable. Generally they may be described as three-storeyed pyramids, having a flat platform on the top, with a well-hole in its centre open to the sky. In this instance the lower platform, so far as I can make out, is about 100 ft. square, with a projection or bastion on each face, behind which the stairs leading to its summit are arranged, as in the great Ceylonese dagobas (*ante*, p. 190). From this a flight of sixteen steps leads direct to the platform of the second, and a similar flight to that of the third storey. The basement here is ornamented with numerous bas-reliefs on panels, representing subjects, taken principally from the 'Ramayana,' but many also from local legends. Each of these is separated from that next it, by a panel, with a circular medallion, containing a conventional animal, or a foliated ornament. The bas-reliefs of the second storey are better executed, and, from their extent, more interesting; their subjects, however, seem to be all taken from local legends not yet identified. The third is ornamented by panels, with winged figures, griffons, Garudas, and flying monsters, more spirited and better executed than any similar figures are in any examples of Hindu art I am acquainted with.

According to Heer Brumund, the temple of Toempang is quite equal to this. "It is," he says, "the most beautiful in Melang. It leaves those of Singa Sari far behind, and may be called the Boro Buddor of Melang."² Unfortunately we have nothing but verbal descriptions of these temples, and of those on the mountain of Sangraham, so it is impossible to feel quite sure about their arrangement or appearance; but as those who have seen them, all describe them as similar, we must be content with this assurance till some photographer visits the place, or, what would be better, till some one goes there who is capable of making a plan and drawing and a few architectural details.

The most remarkable peculiarity of these terraced temples is that all have a well-hole in the centre of their upper platform, extending apparently to their basement. Sometimes it appears to be square, at

¹ 'Boro Boeddoer,' p. 433.

² 'Verhandelingen,' &c., vol. xxxiii. p. 222.



Three-storeyed Terraced Temple at Panataram. (From a Photograph.)

others circular, and enlarging as it descends, being 7 ft. or 10 ft. wide at top.

Both Heer Brumund and Dr. Leemans expend a considerable amount of ingenuity in trying to explain the mystery of these well-temple.¹ Both assume that the wells were covered with pavilions or cell-temple (*Kamer tempels*), but without any warrant, so far as I can make out. At Panataram, for instance, the parapet of the upper terrace is a frail structure, that any man with a crowbar might destroy in a morning, or any earthquake would certainly shake down; yet neither it nor a single stone elsewhere in this temple has been displaced; but of this central pavilion not one vestige now remains, either *in situ* or strewn around. Besides this, a temple without a floor, and with nothing inside but a *facilis descensus* of 20 ft. or 30 ft., and no means *revocare gradum*, does not seem likely to have been popular either with priests or people, and in fact no form of worship can be suggested that would be suitable to them. Neither here nor elsewhere does there seem anything to controvert the theory that these wells were always open to the upper air.

The only suggestion that occurs to me as at all likely to meet the case is that they were Tree-temple; that a sacred tree was planted in these well-holes, either on the virgin soil, or that they were wholly or partially filled with earth and the tree planted in them. The Bo-tree at Buddh Gaya is planted on a terrace, and raised 30 ft. above the plain, ascended on one side by steps; but no excavations have been made, or at least published, which would show whether or not there were three storeys on the three other sides. The Naha Vihara at Ceylon, or the temple of the Bo-tree, is, in reality, just such a temple as that at Panataram. It is apparently in five—practically, in three—storeys, with the tree planted in a well-hole on its summit. We have, unfortunately, no plan of it or of the Javan temple; but if any one will read Captain Chapman's description of the Maha Vihara,² and compare it with Heer Brumund's of temple in Malang and Kediri, abstracted by Dr. Leemans,³ I do not think he can fail to see the resemblance. No plan has yet been made of the Ceylonese vihara, and such photographs as exist have been taken with no higher aim than to make pretty pictures; so that it is extremely difficult to arrive at any correct notions as to its form. Meanwhile the following woodcut (No. 369), copied literally from one in Sir Emerson Tennent's book, will convey an idea of its general appearance. The structure is wholly in brick, and its ornamentation was consequently painted

¹ 'Boro Boeddoer,' p. 439. 'Verhandelingen,' vol. xxxiii. p. 222.

ciety,' vol. xiii. p. 166.

² 'Boro Boeddoer,' pp. 433-439.

³ 'Journal of the Royal Asiatic So-

on plaster, which has wholly¹ disappeared, so that no means of comparison exist between the two modes of decoration. With regard to the Javanese sculptures on these temples, it is safe to assert that not one of them shows any trace of Buddhism—none even that



369. View of the Maha Vihara, Anuradhapura. (From Sir E. Tennent's 'Ceylon.')

could be called Jainism—nor any trace of the Hindu religion as now known to us. We are, for instance, perfectly familiar with the Hindu Pantheon, as illustrated by the sculptures of the nearly contemporary temple of Hullabid (*ante*, p. 402); but not a trace of these gods or goddesses, nor of any of the myths there portrayed, is to be found in these well-temples. Whatever they are, they belong to a religion different from any whose temples we have hitherto met with in this volume, but one whose myths pervade the whole story of Indian mythology. The worship of trees seems to have been taken up in succession by the Buddhists, Jainas, and Vaishnavas, but may be earlier than either, and may, in like manner, have survived all three.

In India, at the present day, there is nothing so common as to see in the villages of Bengal little three-storeyed pyramids of mud—exact models of these Javan temples—on the top of which is planted the Tulsî shrub, the sacred plant of the Vaishnavas (*Ocimum sanctum*, or Sweet Basil), which succeeded the *Ficus religiosa* in the affections of the Hindus. Frequently, however, this emblem is planted in vases, or little models of ordinary temples, the top of which is hollowed out for the purpose. Numbers of these exist also in Java; but no one—at least in recent times—having visited the island who was familiar with the ordinary domestic religion of the Hindus, the

¹ This is by no means so certain; but till some one capable of observing visits the place, we must assume it.

Dutch antiquarians have mistaken every model of a dagoba—of which thousands exist in India—and described it as a lingam, and every Tulsi vase as a Yoni. In most cases they are neither the one nor the other. Even this mistake, however, is instructive, as it shows how much of their emblems, at least, these religions interchanged in the ages of toleration. They are distinct enough now, but before A.D. 750 it is difficult to draw a line anywhere.

At Panataram there is another temple, which, if any one in the island is entitled to be called a Serpent temple, certainly merits that appellation. The Batavian Society have devoted twenty-two photographs to the illustration of its sculptures, but have given no plan and not one syllable of description. There is not even a general view from which its outline might be gathered, and no figure is introduced from which a scale might be guessed. Its date appears to be A.D. 1416. The figures, however, from which this is inferred are not on the temple itself but on a bath or tank attached to it, though, from the character of its sculptures, it is almost certainly coeval.

The reason why it is called a Serpent temple is, that the whole of the basement-moulding is made up of eight great serpents, two on each face, whose upraised heads in the centre form the side pieces of the steps that lead up to the central building, whatever that was. These serpents are not, however, our familiar seven-headed Nagas that we meet with everywhere in India and Cambodia, but more like the fierce crested serpents of Central America. The seven-headed serpent does occur very frequently among the sculptures at Boro Buddor—never independently, however, nor as an object to be worshipped, but as adorning the heads of a Naga people who come to worship Buddha or to take a part in the various scenes represented there. Even then they are very unlike the Indian Naga, whose hood is unmistakably that of an expanded cobra. Those at Boro Buddor and Panataram are crested snakes, like that represented in the Japanese woodcut in 'Tree and Serpent Worship,' page 56.

The sculptures on these monuments are not of a religious or mythological character, but either historical or domestic. What they represent may easily be ascertained, for above each scene is a short descriptive inscription, quite perfect, and in a character so modern that I fancy any scholar on the spot might easily read them. It, probably, has been done, but our good friends the Dutch are never in a hurry, and we must, consequently, wait.

Meanwhile it is curious to observe that we know of only two monument in our whole history which are so treated, and these the earliest and the last of the great school:¹ that at Bharhut, so often alluded to above, erected two centuries before Christ; and this one,

Not however, of the more modern class of temples, inasmuch as when John

erected in the 15th century, while the struggle with the Mahomedan religion was gathering around it that strength, which, within half a century from that time, finally extinguished the faith to which it belonged.

There is one other temple of this class at a place called Matjanponti, regarding which some more information would be interesting. It is described by Heer Brumund as partly of brick, partly of stone, but singularly rich in ornamentation. "The sub-basement," he says, "is composed of a tortoise and two serpents; the heads of these three animals unite on the west face and form the entrance."¹

This and many others of the description are nearly unintelligible without illustrations, but many of them seem to point to a class of Serpent temples, which, if better known, might throw considerable light on the mystery that still shrouds that form of faith in India.

DJEING PLATEAU.

On an elevated plateau, near the centre of the island, on the back of Mount Prahū, there exists a group of some five or six small temples. They are not remarkable either for the size or the beauty of their details, when compared with those of the buildings we have just been describing; but they are interesting to the Indian antiquary, because they are Indian temples pure and simple and dedicated to Indian gods. So far, we feel at home again; but what these temples tell us further is, that if Java got her Buddhism from Gujerat and the mouths of the Indus, she got her Hinduism from Telingana and the mouths of the Kistnah. These Djeing temples do not show a trace of the curved-lined sikras of Orissa or of the Indo-Aryan style. Had the Hindus gone to Java from the valley of the Ganges, it is almost impossible they should not have carried with them some examples of this favourite form. It is found in Burmah and Siam, but no trace of it is found anywhere in Java.

Nor are these temples Dravidian in any proper sense of the word. They are in storeys, but not with cells, nor any reminiscences of such; but they are Chalukyan, in a clear and direct meaning of the term. The building most like these Javan temples illustrated in the preceding pages is that at Buchropully (Woodcut No. 216), which would pass

Crawford visited Ava in 1826, he describes (p. 162, 2nd ed.) his visit to a temple just finished by the reigning monarch, which was adorned with a series of paintings on plaster representing scenes from the life of Buddha. Each of these had a legend in the modern Burmese character written over it; and it is curious to observe how

nearly identical the descriptions are with those which might be written over any Buddhist series. All the scenes there depicted are not perhaps to be found at Bharhut or Sanchi, but all are at Amravati, and in the Gandhara monasteries, or are to be found among the sculptures at Boro Buddor.

¹ 'Boro Boddor,' p. 483.

without remark in Java if deprived of its portico. It, however, like all the Chalukyan temples we know of in India, especially in the Vizam's territory, is subsequent to the 10th century. Most of them belong to the 13th century, and pillars may probably have been less frequently used at the time of Deva Kosuma's visit in A.D. 816. Be this as it may, it is a remarkable fact that there is not a single pillar in Java: at least no book I have had access to, no drawing, and no photograph gives a hint of the existence of even one pillar in the island. When we think of the thousands that were employed by the Dravidians in the south of India, and the Jains in the north-west, it is curious they escaped being introduced here. The early style of Orissa, as mentioned above, is nearly astylar; but in Java this is absolutely so, and, so far as I know, is the only important style in the world of which this can be predicated. What is not so curious, but is also interesting, is, that there is not a true arch in the whole island. In the previous pages, the Hindu horror of an arch has often been alluded to; but then they frequently got out of the difficulty by the use of wood or iron. There is no trace of the use of these materials in the island, and no peculiarly Javan feature can be traced to a wooden original. All is in stone, but without either the pillars or the arches which make up nine-tenths of the constructive expedients of the mediæval architects, and figure so largely in all the western styles of architectural art.

It may also be mentioned here, while describing the negative characteristics of Javan art, that no mortar is ever used as a cement in these temples. It is not that they were ignorant of the use of lime, for many of their buildings are plastered and painted on the plaster, but it was never employed to give strength to construction. It is owing to this that so many of their buildings are in so ruinous a state. In an island where earthquakes are frequent, a very little shake reduces a tall temple to a formless heap in a few seconds. If cemented, they might have been cracked, but not so utterly ruined as they now are.¹

Be this as it may, the Javan style of architecture is probably the only one of which it can be said that it reached a high degree of perfection without using either pillars, or arches, or mortar in any of its buildings.

SUKU.

At a place called Suku, not far from Mount Lawu near the centre of the island, there is a group of temples, which, when properly illustrated, promises to be of great importance to the history of architecture in Java.² They are among the most modern examples of the style,

¹ Col. Yule's visit to Java, 'Journal of the Asiatic Society of Bengal,' 1861-1862, plates 31 and 61, vol. ii. p. 49, *et seqq.* ² Sir S. Raffles' 'History of Java,'

having dates upon them of A.D. 1435 and A.D. 1440,¹ or less than forty years before the destruction of Majapahit and the abolition of the Hindu religion of Java. So far as can be made out, they are coarser and more vulgar in execution than any of those hitherto described, and belonged to a degraded form of the Vaishnava religion. Garuda is the most prominent figure among the sculptures; but there is also the tortoise, the boar, and other figures that belong to that religion. The sculptures, too, are said, many of them, to be indecent, which is only too characteristic a feature of Vishnuism.²

The most interesting feature connected with the remains at Suku, as well as of all the later buildings in Java, is their extraordinary likeness to the contemporary edifices in Yucatan, and Mexico. It may be only accidental, but it is unmistakable. No one, probably, who is at all familiar with the remains found in the two provinces, can fail to observe it, though no one has yet suggested any hypothesis to account for it. When we look at the vast expanse of ocean that stretches between Java and Central America, it seems impossible to conceive that any migration can have taken place eastward—say after the 10th century—that could have influenced the arts of the Americans; or, if it had taken place, that the Javans would not have taught them the use of alphabetical writing, and of many arts they cultivated, but of which the Americans were ignorant when discovered by the Spaniards. It seems equally improbable or impossible that any colonists from America could have planted themselves in Java so as to influence the arts of the people. But there is a third supposition that may be possible, and, if so, may account for the observed facts. It is possible that the building races of Central America are of the same family as the native inhabitants of Java. Many circumstances lead to the belief that the inhabitants of Easter Island belong to the same stock,³ and, if this is so, it is evident that distance is no bar to the connexion. If this hypothesis may be admitted, the history of the connexion would be this:—The Javans were first taught to build monumental edifices by immigrants from India, and we know that their first were their finest and also the most purely Indian. During the next five centuries (A.D. 650–1150) we can watch the Indian influence dying out; and during the next three (A.D. 1150–

¹ Crawford, 'Dict. Indian Archipelago,' *sub voce*.

² Both Sir S. Raffles and Crawford seem to be mistaken in ascribing them to the Saivites; they seem to have been misled by the appearance of a Phallus, but there is no lingam.

³ In the first three volumes of the photographs published by the Batavian Society are numerous examples of rude

sculptures, which are indistinguishable from those of Easter Island. Crawford and other ethnologists do not seem to feel the least difficulty in extending the Malay race from Easter Island to Madagascar; and if this is so, it diminishes the improbabilities of another nearly allied family, extending through the Pacific Islands from Java to the American continent.

1450) a native local style developing itself, which resulted at last in the quasi-American examples at Panataram and Suku. It may have been that it was the blood and the old faith and feelings of these two long dissevered branches of one original race that came again to the surface, and produced like effects in far distant lands. If this or something like it were not the cause of the similarity, it must have been accidental, and, if so, is almost the only instance of its class known to exist anywhere; and, strangely enough, the only other example that occurs is in respect to the likeness that is unmistakable between certain Peruvian buildings and the Pelasgic remains of Italy and Greece. These, however, are even more remote in date and locality, so the subject must remain in its present uncertainty till some fresh discovery throws new light upon it.

This, however, is not the place, even if space were available, to attempt to investigate and settle such questions; but it is well to broach them even here, for, unless attention is directed to the subject, the phenomena are not observed with that intelligent care which is indispensable for the elucidation of so difficult a problem.

The above is, it must be confessed, only a meagre outline of what might be made one of the most interesting and important chapters in the History of Indian Architecture. To do it justice, however, it would require at least 100 illustrations and 200 pages of text, which would swell this work beyond the dimensions within which it seems at present expedient to restrict it. Even, however, were it determined to attempt this, the materials do not exist in Europe for performing it in a satisfactory manner. We know all we want, or are ever likely to know, about Boro Buddor and one or two other monuments, but with regard to most of the others our information is most fragmentary, and in respect to some, absolutely deficient. Any qualified person might, by a six months' tour in the island, so co-ordinate all this as to supply the deficiencies to such an extent as to be able to write a full and satisfactory History of Architecture in Java. But it is not probable that the necessary information for this purpose will be available in Europe for some years to come, and it may be many—very many—unless the work is undertaken on a more systematic plan than has hitherto been the case. Both in this island and in Ceylon the intentions have been good, but the performance disappointing and unsatisfactory. The Dutch have, however, far outstripped our colonial authorities, not only in the care of their monuments, but in the extent to which they have published them. It is only to be hoped that a wholesome rivalry will, before long, render the architectural productions of both islands available for the purposes of scientific research.

CHAPTER IV.

CAMBODIA.

CONTENTS.

Introductory—Temples of Nakhon Wat, Ongcor Thom, Paten ta Phrohm, &c.

INTRODUCTORY.

SINCE the exhumation of the buried cities of Assyria by Mons. Botta and Mr. Layard nothing has occurred so startling, or which has thrown so much light on Eastern art, as the discovery of the ruined cities of Cambodia. Historically, they are infinitely less important to us than the ruins of Nimroud and Nineveh; but, in an architectural point of view, they are more astonishing; and, for the elucidation of certain Indian problems, it seems impossible to overrate their importance.

The first European who visited these ruins in modern times was M. Mouhot, a French naturalist, who devoted the last four years of his life (1858–1861) to the exploration of the valleys of the Mekong and Menam rivers. Though the primary object of his travels was to investigate the natural productions of the country, he seems to have been so struck with the ruins of Ongcor Wat that he not only sketched and made plans of them, but wrote descriptions of all the principal buildings. Unfortunately for science and art he never returned to Europe, being struck down by fever while prosecuting his researches in the northern part of the country; and, though his notes have been published both in this country¹ and in France, they were not prepared for publication by himself, and want the explanatory touches which only an author can give to his own work. Though his melancholy death prevented M. Mouhot from obtaining all the credit he was entitled to for his discovery, it has borne rich fruit as far as the public are concerned.

The next person who visited these ruins was the very learned Dr. Adolph Bastian;² who has written a most recondite but most unsatisfactory work on the Indo-Chinese nations, in five volumes.

¹ 'Travels in Indo-China, Cambodia, and Laos,' by Henri Mouhot. 2 vols. 8vo. Murray, 1864.

² 'Die Völker der Oestlichen Asien,' von Dr. A. Bastian. Leipzig, 1866.

He has also written an account of the ruins in the 'Journal of the Royal Geographical Society' (Vol. xxxv.), and four papers in the 'Ausland' (Nos. 47-50). It is impossible to find out from all these whether Dr. Bastian has satisfied himself who built these temples, what their age is, or to what worship they are dedicated. If he does know anything about these matters, he has carefully concealed it from the uninitiated, under a confused mass of undigested learning that it is impossible to fathom.

His visit to these ruins was followed by that of Mr. J. Thomson, a professional photographer at Singapore, who, at considerable expense and risk, carried his photographic apparatus to the spot, and brought away a plan of the great temple of Nakhon Wat, with some thirty photographs of it, besides views of other places in the neighbourhood.

Since that time the French have sent two thoroughly well equipped expeditions to the place: the first under a Captain Doudart de la Grée in 1866, the second in 1873. As the main object of the first was the exploration of the Mekong river, they were able to devote only a portion of their time to antiquarian researches, and the unfortunate death of their chief on the frontiers of China prevented his ever working out his results to the extent he no doubt would have done had he lived to return home. They were, however, published as he left them, by Lieutenant J. Garnier, the second in command of the expedition, with notes and additions of his own.¹

As they, however, could not complete the investigation, a second expedition was fitted out, under Captain Delaporte, who had taken part in the previous expedition.

They returned to France in 1874, bringing with them not only detailed plans of most of the temples, but copies of nearly all the inscriptions they could find, and a large collection of antiquities and casts. The latter are now arranged in the Château of Compiègne, and accessible to the public. The drawings and inscriptions are in course of publication, and, when available, they will supply materials from which we may reason with confidence, not only as to the arts but as to the history of this wonderful people.² At present we are

¹ 'Voyage d'Exploration en Indo-Chine,' 2 vols. quarto and folio, Atlas of plates. Paris, 1873.

² Few things are more humiliating to an Englishman than to compare the intelligent interest and liberality the French display in these researches, contrasted with the stolid indifference and parsimony of the English in like matters. Had we exercised a tithe of the energy and intelligence in the investigation of Indian antiquities or history, during the

100 years we have possessed the country, that the French displayed in Egypt during their short occupation of the valley of the Nile, or now in Cambodia, which they do not possess at all, we should long ago have known all that can be known regarding that country. Something, it is true, has been done of late years to make up for past neglect. General Cunningham's appointment to the post of Archæological Surveyor of India, and that of Mr. Burgess to a

hardly in a position to do so. What has hitherto been collected has been got together in too fragmentary a manner, and it has not yet gone through the sifting process which is indispensable before it is possible to separate the wheat from the chaff.

In addition to these sources of information there is a most interesting account, written by a Chinese traveller, who spent two years in the country when the kingdom was in its most flourishing state, between the years 1295-97. He was a Buddhist, and, like his predecessors in India, Fa Hian and Hiouen Tshang, sees things a little too much through Buddhist spectacles; but, with this slight defect, nothing can be more graphic than his account of the country and the people.¹

There are also two papers, by Col. James Low, in the 'Journal of the Asiatic Society of Bengal' (Vol. xvii.), which are replete with traditional information extracted from Siamese books.

The first assertion in the traditions of the Cambodians, as gathered by Dr. Bastian, is sufficiently startling. "In the country of Rome or Romaveisei, not far from Takkhasinla (Taxila), reigned a great and wise king. His son, the Vice King—Phra Thong by name—having done wrong, was banished, and, after many adventures, settled in Cambodia," &c.² The time is not indicated, but we gather from the context that it must have been about the 4th century. It may, at first sight, look like catching at a nominal similarity, but the troubles which took place in Kashmir in the reign of Tungina, and generally in western India about the year 319, look so like what is recorded further east, that, at present, that seems the most probable date for the migration, assuming it to have taken place. Many would be inclined to doubt the possibility of any communication between the two countries; but it must be borne in mind, that the country around Taxila in ancient times was called Camboja; that it was the head-quarters of Serpent-worship; that the architecture of Kashmir bears very considerable resemblance to that of Cambodia; while there is a general consent that the Cambodians came from India. If this were so, it seems certain that it was not from the east coast that they migrated. As pointed out above, the Indians who introduced Buddhism and Buddhist architecture into Java went there from Gujerat or the countries on the west coast. This hardly seems doubtful, and there is

similar office in the Bombay Presidency, are steps in the right direction, which, if persevered in, may lead to most satisfactory results. Many years must, however, elapse before the good work can be brought up to the position in which it ought to have been long ago, and mean-

while much that was most important for the purpose has perished, and no record of it now remains.

¹ The work is translated *in extenso* in Abel Remusat's 'Nouveaux Mélanges Asiatiques,' vol. i. p. 78, *et seqq*

² Bastian, *loc cit.*, vol. i. p. 393.

no greater improbability of a migration from the Indus to Cambodia than of one from Gujerat to Java.

Ceylon was always addicted to Snake-worship, and may have formed a half-way house. On the other hand, it is by no means improbable that the communication may have taken place behind the Himalayas; in fact, that the religion of the two countries was derived from some common centre in Northern Asia.

All this will require careful elaboration hereafter, in some place where it can be more fully treated than is possible here. All that is wanted now is to insist on the fact that there must have been a connexion between the two countries, and that the traditions of Cambodia point to Taxila as their parent seat.

For six centuries from this time we have nothing but stories of dragon-kings and their beautiful but troublesome daughters; of the treasures and relics they guarded; and of the spells and enchantments which were had recourse to to vanquish and rob them. All this is common to all the nations between Cambodia and the North Cape of Norway, but does not concern us here.

At last we come to a fact. "In the year 957 Inthapathapuri was founded by King Pathummasurivong."¹ In the same manner as the name of the old capital of Siam was the mispronunciation of Ayodhya, so this is only the Cambodian way of spelling Indraprastha, or the old Delhi of the 'Mahabharata.'

Leaping over the intermediate space from this initial date we have a final one in the conquest of the country by the Siamese (A.D. 1351-1374), after which time the old capital was deserted, and no more temples were erected there. Our architectural history is thus confined to the four centuries which elapsed between 951 and 1357. For the first three of these, at least, Nakhon² Thom—the Great City—was the capital. About the middle, however, of the 13th century, the king was afflicted with leprosy "because he had forsaken the Snake-worship of his forefathers," and taken to the Brahmanical or Buddhist heresy, it is not quite clear which; and the capital was then transferred to a site some fifteen miles further east, and a city built, known as Paten ta Phrohm (the City of Brahma?).

Meanwhile we have at least three centuries during which Naga-worship prevailed—giving rise to the erection of a series of temples as large and as richly ornamented as any to be found in any other part of the world. The last of these—that known as Nakhon Wat—was, if not the greatest, at least the best from an architectural point of view, and is the only one of which we have at present sufficient information to speak with confidence.

¹ Bastian, vol. i. p. 429.

ciation of the Indian Nagara, Nuggur.

² Nakhon is only the Siamese pronoun- Thom means "great."

From the little we know of the others it does not seem that there would be any difficulty in arranging them all in a chronological series, from the gradations of style they exhibit; nor of ascertaining their dates, since they are covered with inscriptions in a character that could be read without serious trouble; and these probably contain the names of the kings, which would enable this to be done, approximatively at least, even if there should be no dates.

The buildings of Paten ta Phroh (the Brahmanical) are of a much more varied but less perfect style. They seem, from the descriptions of M. Mouhot and Dr. Bastian, to be Buddhist, Jaina, or Hindu, or all these styles mixed up together as in Java. In fact, they seem very much to resemble the buildings in that island, and their date is about the same, omitting only the Buddhist series, which does not seem to occur here; but, as no detailed drawings or good photographs of them have yet been published, there is very little to be said about them now. For the present our attention must be principally confined to the city of Ongcor—or Ongou, as it is popularly named, but more correctly known as Nakhon Thom—the great city—and especially to the suburban monastery of Nakhon Wat.

It is now not difficult to point out the situation of this city, as the lake near which it is situated and the hills that approach it have generally now found their way into most atlases. Generally it may be said that about half-way between the great rivers of Siam and Cambodia is a lake, the Tali Sab, about 120 miles long, and varying in width from 30 to 60. In the dry weather its average depth is only 4 ft., but in the rains it is fed by the Mekong, of which it is a back-water, and rises 30 ft. or 40 ft. more, so that it is easily navigable for large boats. At a little distance from the northern shore of this lake, in $103^{\circ} 50'$ East longitude and $13^{\circ} 30'$ North latitude, the ruins are to be found, situated in a great plain extending some fifty miles in width between the lake and the hills on its northern boundary.¹

TEMPLE OF NAKHON WAT.

The temple of Nakhon Wat, literally “the temple of the city,” or “of the capital,” as it is now called by the Siamese, is situated in a sandy plain, about four miles to the southward of the city of Ongcor itself, and between it and the lake Tali Sab. As will be seen from the small plan (figure 2, Woodcut No. 370) it is almost an exact square, and measures nearly an English mile each way. The walled

¹ The French have navigated the lake in Mouhot's ‘Travels;’ but the best are in a large steamer, and published detailed charts of the river. Maps are also found in those which are found in the Atlas of Lieut. Garnier's work above referred to.

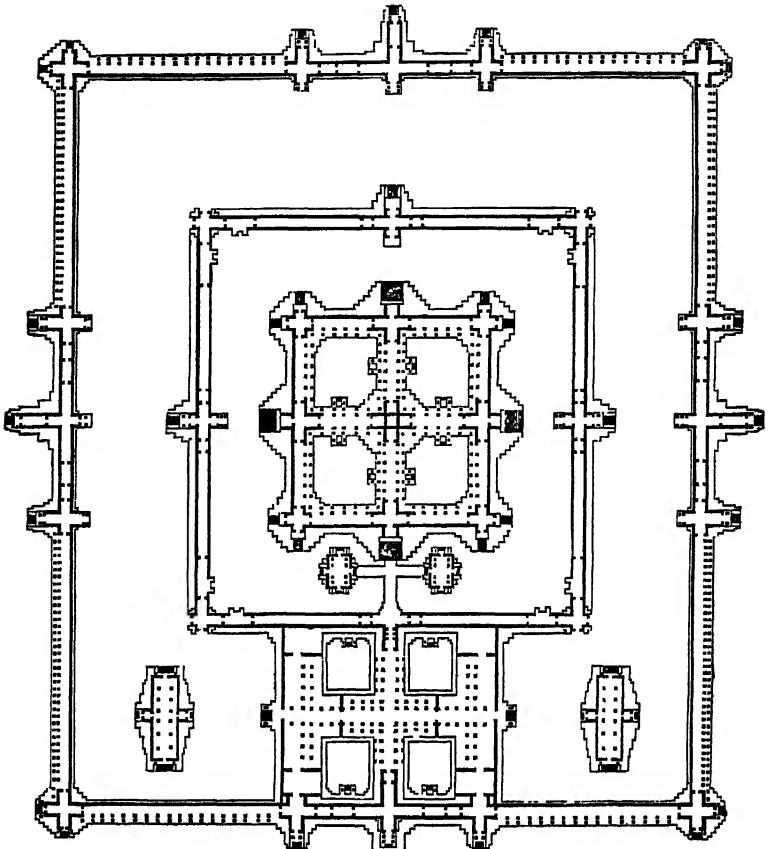


Fig 1.

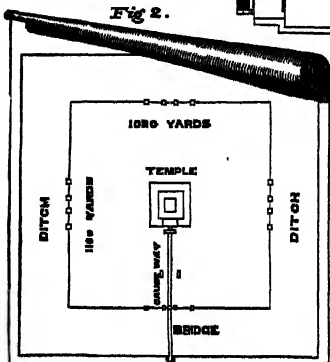


Fig 2.



370. Plan of Temple of Nakhon Wat. (From a Survey by Mr. J. Thomson.) Scale 155 ft. to 1 in.

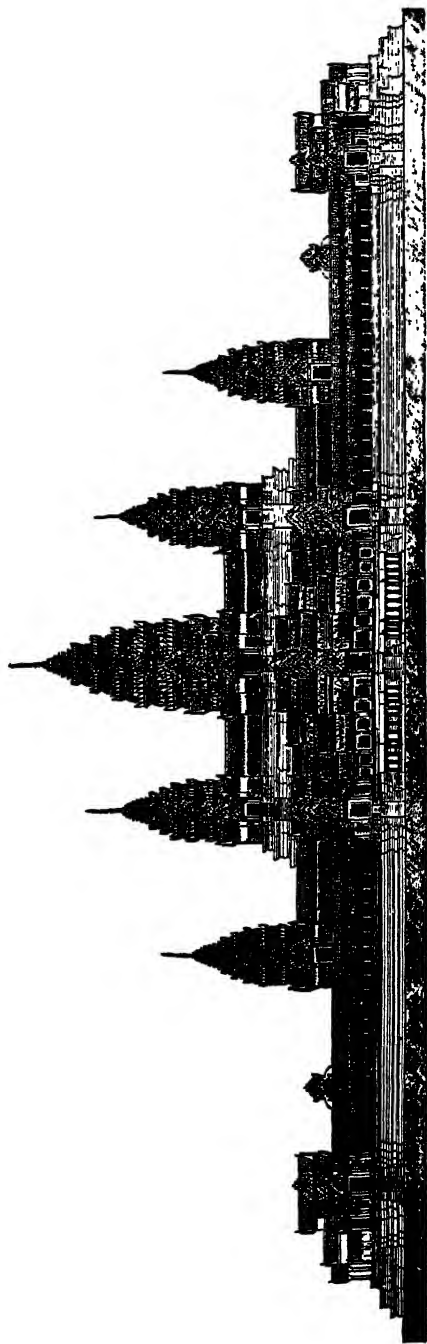
enclosure of the temple measures 1080 yards by 1100, and is surrounded by a moat or ditch 230 yards wide. The moat is crossed on the west by a splendid causeway, adorned by pillars on either side. This leads to the great gateway, not unlike the gopura of a Dravidian temple, five storeys in height, but extended by lateral galleries and towers to a façade more than 600 ft. in extent. Within this a second raised causeway, 370 yards long, leads to a cruciform platform in front of the temple (shown in figure 1, Woodcut No. 370). On either side of this, about half-way down, is a detached temple, which anywhere else would be considered of importance, but here may be passed over.

The general plan of the temple will be understood from the woodcut (No. 370). It consists of three enclosures, one within the other, each raised from 15 ft. to 20 ft. above the level of that outside it, so as to give the whole a pyramidal form. The outer enclosure measures 570 ft. by 650 ft., and covers, therefore, about 370,000 sq. ft. The great temple at Karnac (Thebes) covers 430,000 sq. ft. There are three portals, adorned with towers on each face, and on either side of these are open galleries or verandahs, which, with their bas-reliefs, are probably the most remarkable features of this temple. Their external appearance will be understood from the Woodcut No. 373; that of the interior from Woodcut No. 374; though these illustrations are on too small a scale to do justice to their magnificence.

Its appearance in elevation may be gathered from Woodcut No. 371, which shows it to be a pyramid more than 600 ft. in breadth across its shortest width north and south, and rising to 180 ft. at the summit of the central tower. It is, consequently, both larger and higher than Boro Buddor, and notwithstanding the extraordinary elaboration of that temple it is probably surpassed by this one, both in the extent of its ornamentation as well as in the delicacy of its carvings. There may have been as much, or nearly as much, labour bestowed on the colonnades at Ramisseram as on this temple; but otherwise the Indian example cannot compare with either of these two. It has literally no outline, and practically no design; while both Nakhon Wat and Boro Buddor are as remarkable for their architectural designs as for their sculptural decorations.

The mechanical arrangements of the galleries or colonnades above referred to are as perfect as their artistic design. These will be understood from the diagram, Woodcut No. 372. On one side is a solid wall of the most exquisite masonry, supporting the inner terrace of the temple. It is built of large stones without cement, and so beautifully fitted that it is difficult to detect the joints between two stones. At a distance of 10 ft. 5 in. in front of this stands a range of square piers, very much in the proportion of the Roman Doric order, with

capitals also similar to the classical examples, but more ornamented.

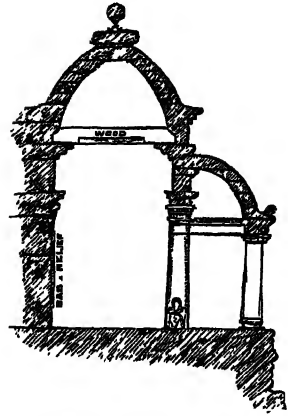


Elevation of the Temple of Nakhon Wat. (From a drawing by Lacretien Garnier.)

These pillars have no bases, but on each face is carved a figure of a devotee or worshipper, surmounted by a canopy of incised ornament, which is also carried along the edge of the shafts. The pillars carry an architrave and a deep frieze, which, in the inner part of the temple, is ornamented with bas-reliefs of the most elaborate character, and above this is a cornice of very classical outline. Above the cornices is a pointed arch, not formed with voussoirs, but of stones projecting one beyond the other, as with the old Pelasgi and the Indians to the present day. This is quite plain, and was probably originally intended to be hidden by a wooden ceiling, as indicated in the diagram; at least, Mr. Thomson discovered the mortises which were intended to secure some such adornment, and in one place the remains of a teak-wood ceiling beautifully and elaborately carved.

Outside this gallery, as shown in the Woodcuts Nos. 372, 373, is a second, supported by shorter pillars, with

both base and capital. This outer range supports what may be called a tie-beam, the one end of which is inserted into the inner column just below the capital. So beautifully, however, is this fitted that M. Mouhot asserts the inner columns are monoliths, and, like the other joints of the masonry, the junction cannot be detected even in the photograph unless pointed out. The beauty of this arrangement will at once strike anyone who knows how difficult it is to keep the sun out and let in the light and air, so indispensable in that climate. The British have tried to effect it in India for 100 years, but never hit on anything either so artistic or convenient as this. It is, in fact, the



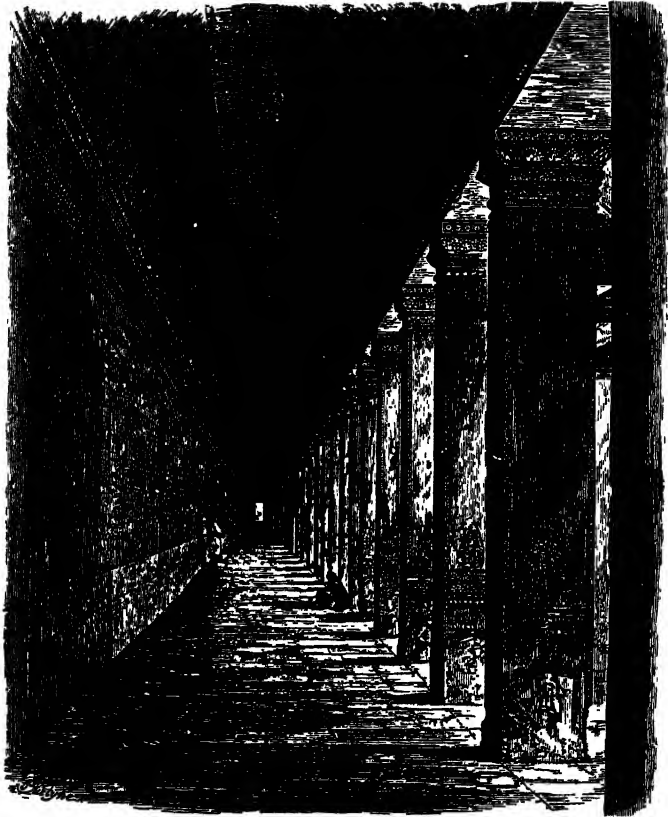
372. Diagram Section of Corridor, Nakhon Wat.



373. View of exterior of Nakhon Wat. (From a Photograph by Mr. J. Thomson.)

solution of a problem over which we might have puzzled for centuries, but which the Cambodians resolved instinctively. The exterior cornice here, as throughout the temple, is composed of infinite repetitions of the seven-headed snake.

The most wonderful parts, however, of these colonnades of Nakhon Wat, are the sculptures that adorn their walls, rather than the architecture that shelters them. These are distributed in eight compart-



374. View of Interior of Corridor, Nakhon Wat. (From a Photograph by Mr. J. Thomson.)

ments, one on each side of the four central groups of entrances, measuring each from 250 ft. to 300 ft. in length, with a height of about $6\frac{1}{2}$ ft. Their aggregate length is thus at least 2000 ft., and assuming the parts photographed to be a fair average, the number of men and animals represented extends from 18,000 to 20,000. The relief is so low that in the photograph it looks at first sight as if incised—*intagliato*—like the Egyptian sculptures; but this is not the case. Generally speaking, these reliefs represent battle-scenes of the most

animated description, taken from the 'Ramayana,' or 'Mahabharata,' which the immigrants either brought with them, or, as the Siamese annals say, received from India in the 4th or 5th century. These, Pathammasurivong, the founder of the city, caused to be translated into Cambodian, with considerable variations, and here they are sculptured almost *in extenso*.¹

One bas-relief, however, is occupied by a different subject—popularly supposed to represent heaven, earth, and hell. Above is a procession so closely resembling those in Egyptian temples as to be startling. The king is borne in a palanquin very like those seen in the sculptures on the banks of the Nile, and accompanied by standards and emblems which go far to complete the illusion. In the middle row sits a judge, with a numerous body of assessors, and the condemned are thrown down to a lower region, where they are represented as tortured in all the modes which Eastern ingenuity has devised. It is not clear, however, that this is a theological hell; it seems more probable that it represents the mode in which the Indian immigrants "improved" the natives. One subject alone can be called mythological, and it wears an old familiar face; it represents the second Avatar of Vishnu, the world-supporting tortoise, and the churning of the ocean with the great snake Naga. No legend in Hindu mythology could be more appropriate for a snake-temple; but, notwithstanding this, it is out of place, and I cannot help fancying that it was his choice of this subject that gave rise to the tradition that the king was afflicted with leprosy because he had deserted the faith of his forefathers. This relief is evidently the last attempted, and still remains unfinished.

The only other temples that I am aware of where sculpture is used in anything like the same profusion are those at Boro Buddor in Java and that at Hullabid, described above, page 401. In the Indian example, however, the principles on which it is employed are diametrically opposed to those in vogue in Cambodia. There all the sculptures are in high relief, many of the figures standing free, and all are essential parts of the architecture—are, in fact, the architecture itself. Here, however, the two arts are kept quite distinct and independent, each mutually aiding the other, but each perfect by itself, and separate in its aim. The Gothic architects attempted to incorporate their sculpture with the architecture in the same manner as the Indian architects. The Greeks, on the contrary, kept them distinct; they provided a plain wall outside the cella of the temple for their paintings and sculpture, and protected it by screens of columns precisely as the Cambodians did; and it is difficult to say which was the best principle. A critic imbued with the feelings of

¹ Bastian, vol. i. p. 402.

medieval art would side with the Indians; but if the Greeks were correct in their principle, so certainly were the Cambodians.

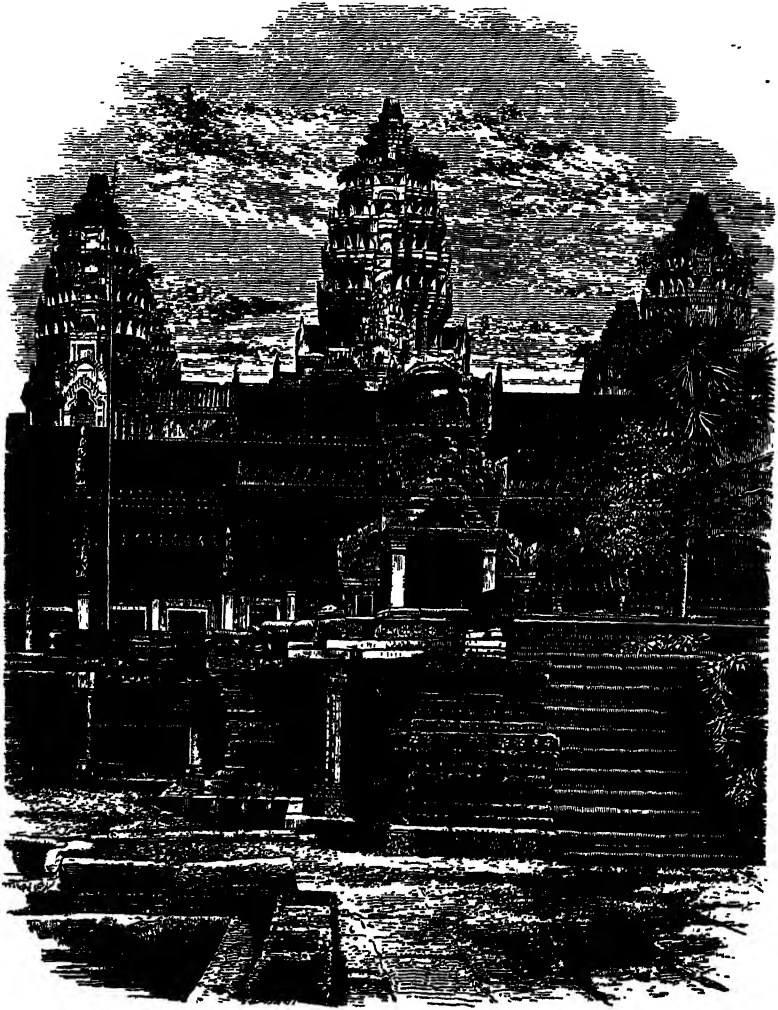
Leaving these outer peristyles for the present, and entering by the west door, we find ourselves in an ante-naos measuring 180 ft. by 150 ft., supported by more than 100 columns, and lighted by four small courts open to the sky above; but the floors, as in all Naga temples, are tanks or reservoirs for water. The whole of this part is arranged most artistically, so as to obtain the most varied and picturesque effects, and is as well worthy of study as any part of the temple. Beyond this, on either hand, is a detached temple, similar in plan to those that stand on either side of the causeway, half-way between the entrance and the temple.

Ascending from this we enter the middle court, in the centre of which stands what may be considered as the temple itself. It measures 200 ft. by 213 ft., and is crowned by five towers or spires, one on each angle, and one, taller than the others, in the centre, rising to a height of 180 ft. The central tower has four cells, like that at Sadri, one facing each way. The general appearance of these towers may be gathered from the elevation (Woodcut No. 371), and from Woodcut No. 375. They are very Indian in character and outline, but, when looked closely into, are unlike anything known in that country. The building which resembles the inner temple most, so far as at present known, is that at Sadri (Woodcut No. 133). Its dimensions are nearly the same, 200 ft. by 225 ft.; like this, it has five spires similarly disposed, and four open courts; and at Sadri, as here, there are a certain number of snake-images, which suggest a connexion between the two. But there the similarity ceases. The extraordinary amount of richness and exuberance of detail in the Cambodian temple far surpasses that of the Indian example; and the courts at Nakhon Wat are not courts but water-tanks. How far the lower courts were also capable of being flooded is not clear, nor whether the whole area, 1100 yards square, in which the temple stands, was not also capable of being turned into a lake.¹ Judging from the analogy of the Kashmiri temples, it would seem probable that this may have been the case. If it were, it is difficult to conceive a more fairy-like scene than this temple would have presented, rising from the lake which reflected its forms in the calm stillness of a tropical sunset.

One of the most curious circumstances connected with the architecture of this temple is, that all its pillars are as essentially of the Roman Doric order, as those of Kashmir are of the Grecian Doric

¹ Mr. Thomson was informed that and the temple could be reached in during the rains the whole was flooded, boats.

Even if this is disputed, one thing at least is certain, that no such pillars occur anywhere in India. At Nakhon Wat there is not a single bracket-capital nor an Indian base. The pillars nowhere change into

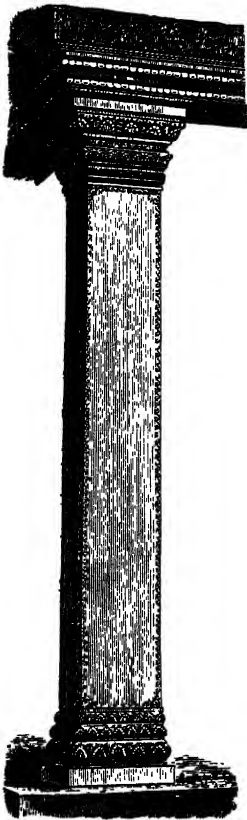


375. General View of Temple of Nakhon Wat. (From a Photograph by Mr. J. Thomson.)

octagons or polygons of sixteen or thirty-two sides,¹ and all the entablatures are as unlike Indian forms as can well be conceived. At

¹ Outside the temple the sides of the causeways are in places ornamented with dwarf columns of circular form. They seem to simulate a bundle of eight reeds, and have tall capitals.

Nakhon Wat, also, there are intersecting vaults and ingenious roofing-contrivances of all sorts, but no dome, and no hint that the architects were aware of the existence of such a form. On the contrary, take such a pillar as that shown in Woodcut No. 376 : the proportion of diameter to height ; the entasis ; the proportion between the upper and lower diameter ; the capital with its abacus ; the base with its plinth ; the architrave, &c., are so like the Roman order that it is difficult to conceive the likeness being accidental.



376. Pillar of Porch,
Nakhon Wat.
(From a Photograph by
Mr. J. Thomson.)

But whoever gave the design for these pillars—and, according to M. Mouhot, there are 1582 of them in this single building—we have abundant evidence to show that the people for whom it was erected were of pure Turanian blood. Without insisting on other facts, there are in every part of the building groups of female figures in alto-relievo. They are sometimes in niches or in pairs, as in the Woodcut No. 377, attached to pilasters, or in groups of four or more. There are a hundred or more in various parts of the building, and all have the thick lips and the flat noses of true Tartars, their eyes forming an angle with one another like those of the Egyptians, or any other of the true building-races of the world. Unfortunately, no statues of men are so attached, though there are several free-standing figures which tell the same tale. The bas-reliefs do not help in the inquiry, as the artist has taken pains to distinguish carefully the ethnographic peculiarities of all

the nations represented, and, till the inscriptions are read, and we know who are intended for Indians or who for Chinese or Cambodians, we cannot use the evidence they supply.

It is a well-known fact that, wherever Serpent-worship prevailed in any part of the world, it was the custom to devote the most beautiful young girls to the service of the temple. This would not only account for these numerous female statues, but their presence affords a hint of the worship to which it was dedicated. This, however, is not required ; for, though the god is gone, and the Buddhists have taken possession of the temple, everywhere the Snake-god appears. Every angle of every roof is adorned with an image of the seven-headed snake, and there are hundreds of them ; every cornice is

composed of snakes' heads; every convolution of the roofs, and there are thousands, terminates in a five or seven-headed snake. The balustrades are snakes, and the ridge of every roof was apparently adorned with gilt dragons. These being in metal, have disappeared, but the holes into which they were fixed can still be seen on every ridge.

There is no image in the sanctuary, of course, because it is the peculiarity of this religion that the god is a living god, and dies, or is eaten up by his fellow divinities, so that no trace of him remains. But, beyond all this, the water-arrangements which pervade every part of the great temple are such as belong to the worship of the Serpent, and to that only.

At present this temple has been taken possession of by Siamese bonzes, who have dedicated it to the worship of Buddha. They have introduced images of him into the sanctuaries and other places, and, with the usual incuriousness of people of their class, assert that it was always so; while, unfortunately, no one who has yet visited the place has been so familiar with Buddhist architecture as to be able to contradict them. If, however, there is one thing more certain than another



377. Lower Part of Pilaster, Nakhon Wat. (From a Photograph by Mr. J. Thomson.)

in this history, it is that Nakhon Wat was not originally erected by Buddhists or for Buddhist purposes. In the first place, there is no sign of a dagoba or of a vihara, or of a chaitya hall in the whole building, nor anything that can be called a reminiscence of any feature of Buddhist architecture. More than this, there is no trace of Buddha, of any scene from his life, or from the jatakas to be found among the sculptures. In former days it might be excusable to doubt this ; but it is not so now that any man may make himself familiar with the sculptures at Bharhut, at Sanchi, or Amravati, or with those from the Gandhara monasteries or at Boro Buddor. It is just as easy to recognise a Buddhist scene or legend in these representations, as it is to identify a Christian scene in the Arena chapel at Padua, or at Monreale near Palermo. What may hereafter turn up I do not know, but meanwhile I most unhesitatingly assert that there is not a trace of Buddhism in any of the bas-reliefs yet brought to light from Nakhon Wat, nor an integral statue of Buddha or of any Buddhist saint about the place.

I am, of course, aware that there are traditions of Asoka having sent missionaries there, and of Buddhaghosha having visited the place,¹ but they are the merest of traditions, imported, apparently, from Siam, and resting on no authenticated basis. Had Buddhists ever come here *en masse*, or the country ever been converted to that religion, as was the case in Java, it seems impossible the fact should not be observable in the buildings. But there seems no trace of it there. There is no Eastern country, in fact, where that religion seems to have been so little known in ancient times. The testimony of the Chinese traveller, who visited the country in A.D. 1295,² is sufficient to prove it did exist in his time ; but, like his predecessors Fa Hian and Hiouen Tshang, he saw his own faith everywhere, and, with true Chinese superciliousness, saw no other religion anywhere.

So far as can be at present ascertained, it seems as if the migrations of the Indians to Java and to Cambodia took place about the same time and from the same quarter ; but with this remarkable difference : they went *en masse* to Java, and found a *tabula rasa*—a people, it may be, numerous, but without arts or religion, and they implanted there their own with very slight modifications. In Cambodia the country must have been more civilized, and had a religion, if not an art. The Indians seem slowly, and only to a limited extent, to have been able to modify their religion towards

¹ Garnier, loc. cit., vol. i. p. 120. Bastian, vol. i. pp. 400, 415, 438, &c.

² In the extracts from the 'Chinese Annals,' translated by Abel Remusat, in the first volume of the 'Nouveaux Mé-

langes Asiatiques,' he finds the earliest mention of the Cambodian kingdom in A.D. 618. From that period the accounts are tolerably consecutive to A.D. 1295, but before that nothing.

Hinduism, probably because it was identical, or at least sympathetic; but they certainly endowed the Cambodians with an art which we have no reason to suppose they before possessed. Now that we know to what an extent classical art prevailed in the country these Indians are reputed to have come from, and to how late a date that art continued to be practised in the north-west, we are no longer puzzled to understand the prevalence of classical details in this temple; but to work out the connexion in all its variations is one of the most interesting problems that remain to exercise the ingenuity of future explorers.

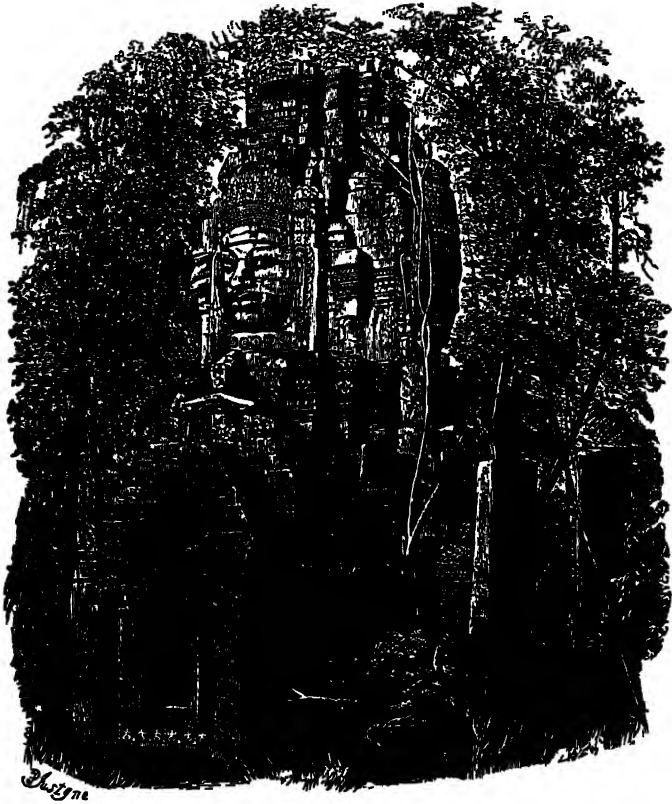
BAYON.

There is a temple within the city walls which, when as well known, may prove to be a grander and more splendid temple than Nakhon Wat itself. When Mr. Thomson visited the place, it was so overgrown with jungle that he could not make out its plan or even count its towers. Garnier could only form a diagram of its plan (plate 21), but he gave two views—one a woodcut in the text (page 67), the other a lithograph in his atlas. It is understood, however, that M. Delaporte has cleared out the place, and made careful plans and drawings of the whole, so that in a short time we may expect to know all about it. It is a rectangle, measuring about 400 ft. by 433 ft., and its general appearance may be gathered by imagining the effect of Nakhon Wat with fifty-two towers instead of nine, and the whole perhaps more richly and elaborately ornamented than even that temple. It certainly appears to be older—probably it belongs to the 11th or 12th century; and its sculptures are consequently better in execution, though whether they are equal in design we have yet to learn.

The most remarkable feature in the design is, that each of the towers is adorned by four great masks. One of the smaller of these is shown in the next woodcut (No. 378), and gives an idea of the style of their decorations, but cannot of the larger towers, nor of the effect of a great number of them grouped together, and dominated by one in the centre 60 ft. in diameter, and of proportionate height.

The question still remains, to what deity, or for what form of worship, was this strange temple erected? We know of nothing like it elsewhere. It certainly is not Buddhist, nor Jaina, nor, so far as known, is it Hindu. Neither Siva nor Vishnu, nor any of the familiar gods of that Pantheon, appear anywhere. It may turn out to be otherwise, but at present there seems no escape from the hypothesis that it was dedicated to Brahma. We have no temple belonging to this god in India Proper, but he does appear with the other two in sculptures at Hullahid, and in other places, completing the trinity. His images are found much more frequently in Java than in India, though I am

not aware that any temple has yet been found in the island dedicated to him. In Cambodia, however, he plays a most important part in all the local traditions. When, for instance, the sovereign who married the Snake-king's daughter got tired of his father-in-law, he set up an image of the four-faced Brahma over the gates of the city, which so terrified the old man that he fled to his dark abode cursing his ungrateful children. Such an image does still exist over the principal



378. One of the Towers of the Temple at Ongcor Thom. (From a Photograph by Mr. J. Thomson.)

gate of the city; but the Chinese traveller, who visited the place in 1295,¹ calls it a five-faced image of Buddha! The traveller was a Buddhist, and, as before mentioned, saw his own religion everywhere, and that only in every temple and in every place.

All the traditions collected by Bastian, and the numerous images of Ta Phrohm or Brahma found by the French at Mount Kromi and elsewhere, fully bear out this assignment of the temple to Brahma.

¹ 'Nouveaux Mélanges Asiatiques,' vol. i. p. 103.

But if it should eventually prove to be correct, what a wide door it opens for speculation, and what a flood of light it would throw on many questions that are now perplexing us. Is it that a worship of Brahma really existed in the north-west, in the original seats of the immigrant races before they passed into India, and that it was left to vegetate there while the settlers adopted the more fashionable religions of Siva and Vishnu in the countries of their adoption? If this were so, a later migration may have taken place by a northern route through Yunan, taking with them the older form of the faith and planting it in this far-off land.

It was not by accident that the knowledge either of Brahma or of these strangely classical forms of art were imported into this country. We cannot yet explain how all this happened, but we see enough to feel sure that in a very few years the solution will be possible—perhaps easy. It would indeed be a triumph if we could track Brahma back to the cave where he has been so long hidden, and connect his worship with some of the known religions of the world.

Rather more than a mile to the eastward of the city is another first-class temple, called Ta Proum, or Paten ta Phroh, the residence of Phroh or Brahma.¹ It is a square, measuring about 400 ft. each way, and, so far as can be made out from M. Mouhot's plan, was of the same class as Nakhon Wat; but, as Lieutenant Garnier says, it is so ruined that its plan can hardly be made out,² and it is so choked with vegetation, that in a few years not one stone of it will remain upon another.

About twenty miles further eastward is another temple of the same class, but much more perfect, called Melea, and at seventy miles a third, called Preacan. These were only imperfectly explored by the first French expedition, but have been thoroughly investigated by the second,³ and we may hope soon to have plans and all the details necessary to enable us to speak with confidence with regard to this curious but most interesting group of temples. They are evidently very numerous, and all most elaborately adorned, and, it need hardly be added, very unlike anything we have met with in any part of India described in the previous chapters of this work. They certainly are neither Buddhist, Jaina, nor Hindu, in any sense in which we have hitherto understood these terms, and they as certainly are not residences or buildings used for any civil purposes. It is possible that, when we become acquainted with the ancient architecture of Yunan, or the provinces of Central and Western China, we may get some hints as to their origin. At present I am inclined to look

¹ Bastian, vol. i. p. 404.

² Garnier. 'Voyage,' &c., vol. i. p. 74.

³ 'L'Art Khmer,' p. 38.

further north and further west for the solution of the riddle; but, till we are in possession of the results of the French expedition, it is premature to speculate.

These great galleried temples may be considered as the most typical, as they certainly are the most magnificent, of the temples of the Cambodians; but, besides these, there are ten or twelve great temples in Ongcor Thom and its neighbourhood, which anywhere else would be considered worthy of attention. Of these, one at Mount Bakeng, to the south of the city, is a five-storeyed pyramid, with sixty small pavilions on its steps, and a platform on its summit, which is now only encumbered with some débris; but whether they are the remains of a Sikra, or whether it was a well-temple like those in Java, is by no means clear.

To the east of the city is another somewhat similar—a pyramid, with three storeys, rising to a height of about 50 ft. It, however, is enclosed in a gallery, measuring 250 ft. each way, and seems to have had five pavilions on its summit.¹

The other temples are not of such magnificence as to justify their being described here; their interest would be great in a monograph of the style, but, without illustrations, their dimensions, coupled with their unfamiliar names, would convey very little information to the reader.²

CIVIL ARCHITECTURE.

The palaces and public buildings of Ongcor seem to be quite worthy of its temples, either as regards extent or richness of decoration. They are, however, as might be expected, in a more ruinous state; being less monumental in their mode of construction, and, what is more to our present purpose, they have neither been drawn nor photographed to such an extent as to render them intelligible.

A view of one of the gates of Ongcor Thom is given by Lieutenant Garnier, Plate 8; and as it is as remarkable as anything about the place, it is to be hoped that full details will be brought home by the present expedition. Fortunately, it is the gateway described by

¹ It would be interesting if among these we could identify that one of which the Chinese traveller gives the following description:—"A l'est de la ville est un autre temple de l'esprit nommé *Pho-to-li*, auquel on sacrifie des hommes. Chaque année le roi va dans ce temple faire lui-même un sacrifice humain pendant la nuit."—"Nouveaux Mélanges Asiatiques," vol. i. p. 83.

² At Buribun, on the other side of the lake, Dr. Bastian informs me there is a complete copy of the Nakhon Wat sculptures, carved in wood in the 16th century. The place was the residence of the kings of Cambodia after the fall of the capital, and as original art had then perished, they took this mode of adorning their palace. What a prize for any European museum!

the Chinese visitor, in 1295,¹ as at the end of the great bridge, which was, and is, adorned by fifty-two giants, bearing on their arms the great seven-headed Naga that formed the parapet of the bridge.

On each side of the gate are three elephants, and on each angle the head of a great seven-headed Naga. Above these are figures of men and women, but the great feature is the four-faced mask of Brahma, as on the spires of the Baion (Woodcut No. 378). The details of the upper part also so far resemble those of that temple that they must be nearly the same age. This, therefore, cannot well be the four-faced figure of Brahma, which his ungrateful children set up to frighten their parent when they were tired of him (*ante*, page 680); but it is curious to find the legend repeated in stone and standing at this day. It may, however, be that the stone gave rise to the legend; but, whichever way it arose, it is equally interesting as material evidences of a history and of a religion of which, up to this time, we know little or nothing.

The walls of the cities were also of very great extent, and of dimensions commensurate with their importance. They seem generally to have been constructed of a coarse ferruginous stone in large blocks, and only the gates and ornamental parts were of the fine-grained sandstone of which the temples and palaces are built. Wonderful as these temples and palaces are, the circumstance that, perhaps, after all gives the highest idea of the civilization of these ancient Cambodians is the perfection of their roads and bridges. One great trunk road seems to have stretched for 300 miles across the country from Korat, in a south-easterly direction, to the Mekong river. It was a raised causeway, paved throughout like a Roman road, and every stream that it crossed was spanned by a bridge, many of which remain perfect to the present day. Dr. Bastian describes two of these: one, 400 ft. in length, and 50 ft. in breadth, richly ornamented by balustrades and cornices, and representations of snakes and the Snake king.² The extraordinary thing is, that it is constructed without radiating arches, but like every structure in the place, by a system of bracketing or horizontal arches, and without cement. Yet it has withstood, for five centuries at least, the violence of the tropical torrent which it spans.

Even if no vestiges of these roads or bridges remained, the sculptures of Nakhon Wat are sufficient to prove the state of perfection which the art of transport had reached in this community. In these there are numerous representations of chariots, all with wheels from 3 ft. to 5 ft. in height, and with sixteen spokes, which must be of

¹ 'Nouveaux Mélanges Asiatiques,' vol. i. p. 103. Garnier, woodcuts pp. 61 and 62.

² 'Journal of the Royal Geographical Society,' vol. xxxv. p. 75.

metal, for no London coachmaker at the present day could frame anything so delicate in wood. The rims, too, are in metal, and, apparently, the wheel turns on the axle. Those who are aware how difficult a problem it is to make a perfect wheel will appreciate how much is involved in such a perfect solution of the problem as is here found. But it requires a knowledge of the clumsiness of the Romans and our mediæval forefathers in this respect, and the utter barbarism of the wheels represented in Indian sculptures and still used in India, to feel fully its importance as an index of high civilization.

If, however, the Cambodians were the only people who before the 13th century made such wheels as these, it is also probably true that their architects were the only ones who had sufficient mechanical skill to construct their roofs wholly of hewn stone, without the aid either of wood or concrete, and who could dovetail and join them so beautifully that they remain watertight and perfect after five centuries of neglect in a tropical climate. Nothing can exceed the skill and ingenuity with which the stones of the roofs are joggled and fitted into one another, unless it is the skill with which the joints of their plain walls are so polished and so evenly laid without cement of any kind. It is difficult to detect their joints even in a sun-picture, which generally reveals flaws not to be detected by the eye. Except in the works of the old pyramid-building Egyptians, I know of nothing to compare with it.

When we put all these things together, it is difficult to decide whether we ought most to admire the mechanical skill which the Cambodian architects displayed in construction or the largeness of conception and artistic merit which pervades every part of their designs. These alone ought to be more than sufficient to recommend their study to every architect. To the historian of art the wonder is to find temples with such a singular combination of styles in such a locality—Indian temples constructed with pillars almost purely classical in design, and ornamented with bas-reliefs so strangely Egyptian in character. To the ethnologist they are almost equally interesting, in consequence of the religion to which they are dedicated. Taken together, these circumstances render their complete investigation so important that it is hoped it will not now be long delayed.

BOOK IX.

CHINA.

CHAPTER I.

INTRODUCTORY.

CHRONOLOGY.

Period of Hea	B.C. 2100	Wootae dynasty ; China divided into two	
Woo Wong period of Chow	1100	kingdoms	A.D. 416
Confucius died	477	China reunited, capital Honan	585
Chy hoang-ty built Great Wall	240	Tang dynasty	897
Han dynasty	201	Northern China conquered by Mongols	1234
Hoty, seventeenth king ; Buddhism introduced		Kublai Khan	1281
	A.D. 90	Ming dynasty ; Mongol expelled	1366
Tsin dynasty	260	Manchow Tartar dynasty ; now on the throne	1644

It is extremely difficult, in the present state of our knowledge, to write anything, either conclusive or satisfactory, about the architecture of China. This may arise partly from the incuriousness of travellers, and partly because there really are no buildings in the country worthy of the people or their civilization. Till very recently, the latter would have appeared to be the true cause of our ignorance ; but lately the photographic camera has penetrated even within the walls of the imperial city of Pekin, and has brought away impressions which go some way to modify this opinion. Unfortunately, the camera has not been accompanied by the measuring-tape or the notebook, and our information is therefore, in some respects, vague ; but it seems certain that there are buildings worthy of more attention than has hitherto been bestowed upon them. Even these, however, are not such as we might expect to find among a people whose history and whose civilization seems so exact a counterpart of that of Egypt. In both countries we have the same long succession of dynasties with dates, extending through 3000 or 4000 years, interrupted only by shepherd invasions which in both countries lasted about five centuries, when the words of Manetho are as literally applicable to the Taeping rebellion as they are to the overthrow of

the Hyksos by the uprising of the native Egyptian races. During all this long period the same patriarchal form of government prevailed in both countries—the king being not only the head of the secular government, but the chief priest of the people. Both people early attained a certain stage of civilization, and maintained it without change or progress during the whole period of their existence. The syllabic symbols of the Chinese are the exact counterpart of the hieroglyphic writing of the Egyptians, as clumsy and as unlike that of any other contemporary nation, and as symbolic of their exclusive segregation from the rest of mankind. In both countries there was always the same calm contemplation of death, the same desire for an honourable funeral and a splendid tomb, and the same reverence for the dead. In these and fifty other particulars, the manners and customs of the two peoples seem identical, and the perfect parallelism only breaks down when we come to speak of their buildings. There are no tombs in China to be compared with the Pyramids, and no temples that approach those of Thebes in dimensions or in splendour.

If the Chinese were as closely allied to the Tartar or Mongolian tribes on their north-eastern frontier as is generally supposed, this difference could not have existed. It may therefore be, as has been suspected, that the true Chinese are more closely allied to the Polynesian races, especially on the sea-board, which is the only part of the country we are really acquainted with. When the inner country has been more carefully examined, it is probable that we may see cause to modify our opinion as to the architectural character of the Chinese people.

This will be especially the case if, as is highly probable, the so-called Indo-Chinese inhabitants of Cambodia are very much more closely allied in blood to the Chinese than they are to any of the races inhabiting India; since, by the erection of the buildings described in the last division of this work, the Cambodians have nobly vindicated their title to be considered as one of the great building races of the world. Considering the short time of their existence and the limited area they occupied, they may in fact lay claim to having surpassed even the Egyptians in this respect.

It will be strange if in Honan and Quang-si we do not eventually find the links which will confirm the connexion of the two races of Cambodia and China, and explain what at present can only be regarded as one of the unsolved problems of architectural history.

A little well-directed industry on the spot would very soon clear all this doubt away. Meanwhile there are other minor causes which may have contributed to the absence of monumental buildings in China, and which it may be as well to allude to before proceeding further. In the first place, the Chinese never had either a dominant priesthood

or a hereditary nobility. The absence of the former class is a very important consideration, because, in all countries where architecture has been carried to anything like perfection, it is to sacred art that it has owed its highest inspiration, and sacred art is never so strongly developed as under the influence of a powerful and splendid hierarchy. Again, religious and sectarian zeal is often a strong stimulus to sacred architecture, and this is entirely wanting in this remarkable people. Though the Chinese are bigoted to a greater extent than we can well conceive in all political matters, they are more tolerant than any other nation we know of in all that concerns religion. At the present moment three great religious sects divide the empire nearly equally between them. For though Buddhism is the religion of the reigning family, and perhaps numbers more followers than either of the other two, still the followers of the doctrines of Confucius—the contemporary and rival of Sakya Sinha—are a more purely Chinese sect than the other, and hold an equal place in public estimation; while, at the present time, the sect of Laou Tse, or the Doctors of Reason, is more fashionable, and certainly more progressive, than the others.¹ Christianity, too, might at one time have encroached largely on either of these, and become a very prevalent religion in this tolerant empire, had the Jesuits and Dominicans understood that the condition of religious tolerance here is a total abstinence from interference in political matters. This, however, the Roman Catholic priesthood never could be brought to understand; hence their expulsion from the realm, and the proscription of their faith, which otherwise would not only have been tolerated like all others, but bid fair to find more extensive favour than any. Such toleration is highly laudable in one point of view; but the want of fervour and energy from which it arises is fatal to any great exertions for the honour of religion.

In the same manner the want of an hereditary nobility, and indeed of any strong family pride, is equally unfavourable to domestic architecture of a durable description. At a man's death his property is generally divided equally among his children. Consequently the wealthiest men do not build residences calculated to last longer than their own lives. The royal palaces are merely somewhat larger and

¹ The population of China is generally estimated at 400 millions of souls. This I believe to be a gross exaggeration, and would feel very much more inclined to put it at 300 millions, and of that number to estimate the Buddhists at 100 millions of souls. This, however, in the present state of our knowledge, is, and must be, mere guess-work. If we put down 50 millions for the Buddhist population of Thibet, Manchuria, Burmah, Siam, Cambodia, and Ceylon, we shall probably not err on the side of underestimating them, making 150 millions the total number of followers of this religion in the whole world, or one-eighth or one-tenth of the human race—not one-third or one-fourth, at which they are usually estimated.

more splendid than those of the mandarins, but the same in character, and erected with the same ends.

There is no country where property has hitherto been considered so secure as China. Private feuds and private wars were till lately unknown; foreign invasion was practically impossible, and little dreaded. Hence they have none of those fortalices, or fortified mansions, which by their mass and solidity give such a marked character to a certain class of domestic edifices in the western world. Equality, peace, and toleration, are blessings whose value it would be difficult to overestimate; but on the dead though pleasing level where they exist, it is in vain to look for the rugged sublimity of the mountain, or the terrific grandeur of the storm. The Chinese have chosen the humbler path of life, and with singular success. There is not perhaps a more industrious or, till the late wars, happier people on the face of the globe; but they are at the same time singularly deficient in every element of greatness, either political or artistic.

Notwithstanding all this, it certainly is curious to find the oldest civilized people now existing on the face of the globe almost wholly without monuments to record the past, or any desire to convey to posterity a worthy idea of their present greatness. It is no less remarkable to find the most populous of nations, a nation in which millions are always seeking employment, never thinking of any of those higher modes of expression which would serve as a means of multiplying occupation, and which elevate while feeding the masses; and still more startling to find wealth, such as the Chinese possess, never invested in self-glorification, by individuals erecting for themselves monuments which shall astonish their contemporaries, and hand down their names to posterity.

From these causes it may be that Chinese architecture is not worthy of much attention. In one respect, however, it is instructive, since the Chinese are the only people who now employ polychromy as an essential part of their architecture: indeed, with them, colour is far more essential than form; and certainly the result is so far pleasing and satisfactory, that for the lower grades of art it is hardly doubtful that it should always be so. For the higher grades, however, it is hardly less certain that colour, though most valuable as an accessory, is incapable of that lofty power of expression which form conveys to the human mind.

CHAPTER II.

PAGODAS.

CONTENTS.

Temple of the Great Dragon—Buddhist Temples—*Tuas*—Tombs—*Pailoos*—
Domestic Architecture.

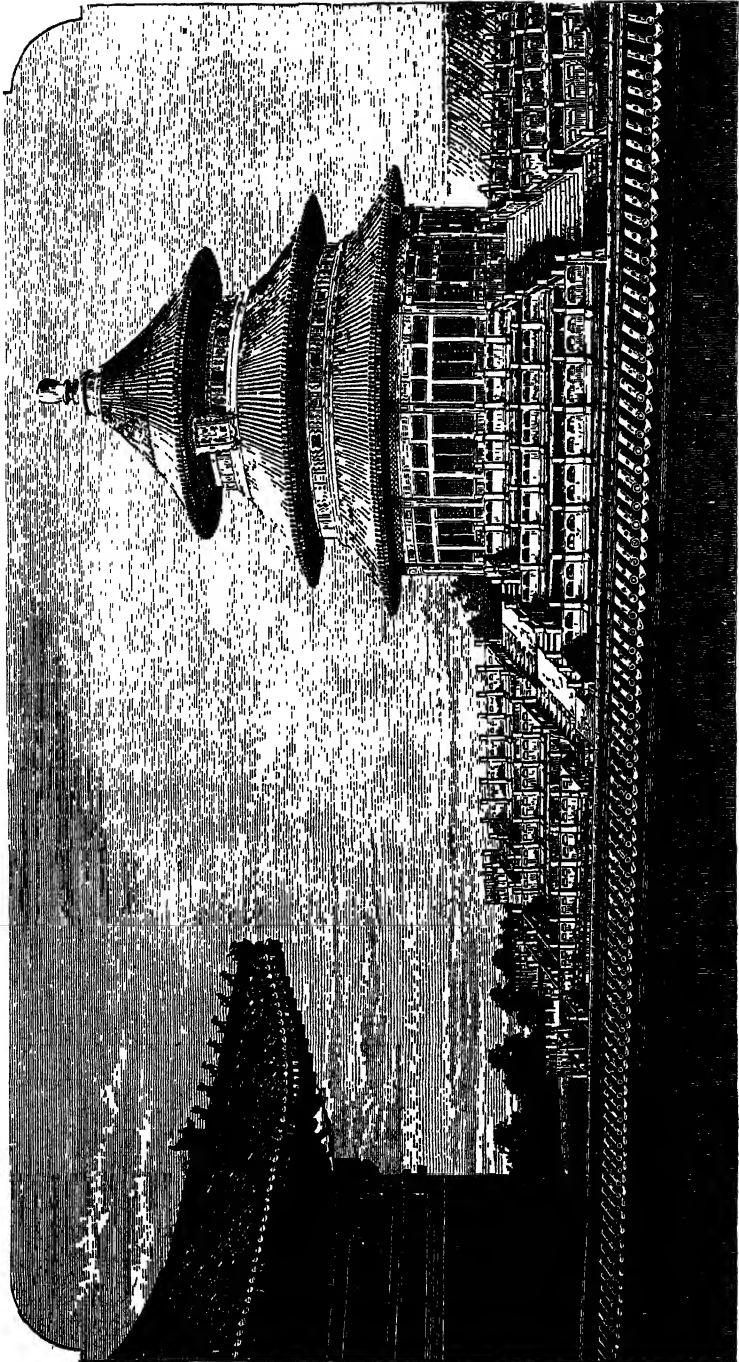
IF we had the requisite knowledge, or if the known examples of Chinese temples were sufficiently numerous, we ought, before describing them, to classify the buildings, apportioning each to that one of the three religions to which it belongs. For the present this must be left to some one on the spot. Meanwhile there is no difficulty in recognising those which belong to the religion of Fo or Buddha. These are generally the nine-storeyed towers or *taas*, which, as will be explained hereafter, are merely exaggerated *tees* of the Indian *dagobas*. The temples, properly so-called, of this religion, are not very magnificent, nor are they generally built in a permanent style of architecture. This is still more the case, apparently, with the temples of Confucius. The only one that has been carefully described and photographed is that at Peking, which is also probably the most magnificent. Judging from our present information, it more resembles a university than a temple. There are neither images nor altars, but great halls, on which are hung up the names of the emperors and of the most distinguished literates of the kingdom. There are no priests; and though ceremonies are there performed annually by the emperor in honour of the great philosopher, these scarcely can be called worship, or the hall a temple.

TEMPLE OF THE GREAT DRAGON.

The most magnificent temple in the capital, so far as we know in the empire, is that known as the Temple of Heaven, or the Great Dragon.¹ It is situated close to the southern wall of the city in a square

¹ The following description is abridged from that by Mr. A. Michie in his work entitled 'The Siberian Overland Route,' Murray, 1864. It is by far the most distinct I have met with. The larger woodcuts in this chapter are generally borrowed from his work. It must, however, be observed that his descriptions differ sometimes essentially from those hitherto

current in European books, which were generally derived from the accounts of the Jesuits, who probably obtained their information from Chinese sources. It is generally safer to trust to the account of an educated gentleman describing what he saw, than to the essay of a mere scholar compiling from information conveyed in a foreign tongue.



Temple of the Great Dragon. (From a Photograph by Beato.)

enclosure measuring about a mile each way. From the outer gate a raised causeway leads to the temple, on either side of which are numerous buildings for the accommodation of the priests, which are approached by frequent flights of steps leading down to a park beautifully planted. At its inner extremity stands the temple itself, a circular building, three storeys in height, with broad projecting roofs, the upper terminating in a gilt ball, directly under which stands the altar.

The temple is raised on a circular pyramid, the three terraces of which are seen in the woodcut. There are several handsome gateways at intervals across the causeway, so arranged that from the entrance the circular temple itself can be seen through the long vista, framed as it were by them; and as the whole of the upper part is covered with blue tiles and gilding, the effect is said to be very pleasing.

In the same enclosure is another temple called that of the Earth, where sacrifices of animals are annually offered to the gods, whoever they may be, to whom this temple is dedicated.

These temples are said to have been erected about the year 1420, and, if so old, seem to be in a very fair state of preservation, considering the manner in which they are now neglected.

In reading Mr. Michie's, or any other description of the Dragon Temple of Peking, it seems impossible to avoid feeling that there are so many points of resemblance between it and the Serpent Temple of Nakhon Wat, that the coincidence can hardly be accidental. The variations are hardly greater than might be expected from difference of age, and the fact that the one was erected by Chinese at the northern extremity of their empire, the other by Cambodians near the southern limit of theirs. All the links, however, which connect the two temples are still wanting; yet, as we have the assertion of the Chinese traveller in 1295 that the Tao-tze religion¹ existed in Cambodia while he was there, we should not feel surprise at any similarity that may be traced between the temples of the two countries.

BUDDHIST TEMPLES.

The only Buddhist temple in China of which any plans have been made, or which I have myself had an opportunity of inspecting, is that at Honan, opposite Canton. Unfortunately it is very modern, and by no means monumental. It is a parallelogram enclosed by a high wall, measuring 306 ft. by 174 ft. In the shorter front facing the river is a gateway of some pretension. This leads to a series of halls opening into each other, and occupying the whole of the longer axis of the internal court. The first and second of these are porches or ante-

¹ 'Nouveaux Mélanges Asiatiques,' vol. i. p. 110.

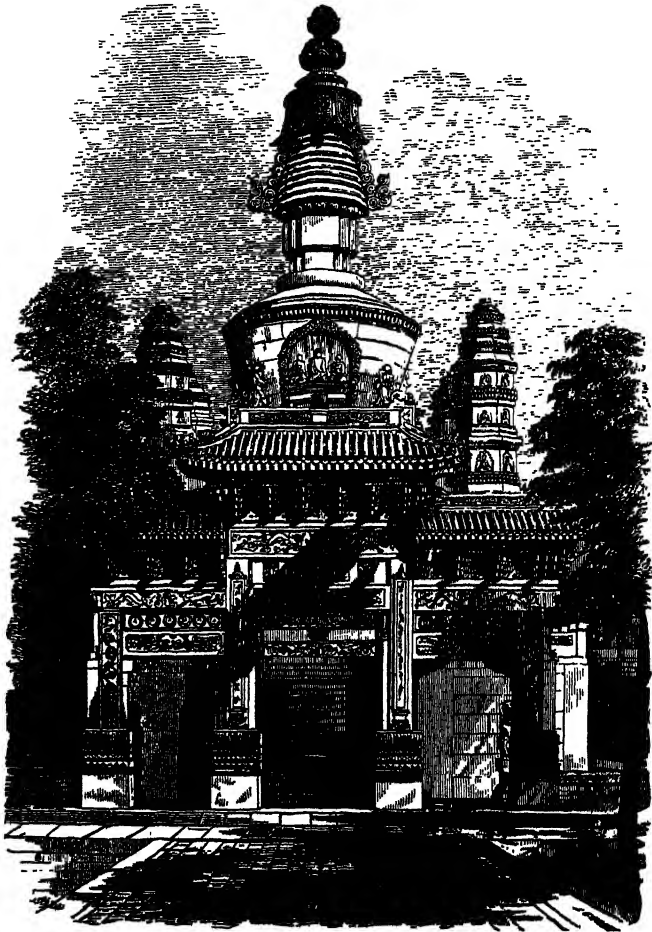
chapels. The central one is the largest, and practically the choir of the building. It contains the altar, adorned by gilt images of the three precious Buddhas, with stalls for the monks and all arrangements necessary for the daily service. Behind this, in the next compartment, is a dagoba, and in its rear another apartment devoted to the goddess Kuan yin, principally worshipped by women—in fact, the Lady Chapel of the church. Around the court are arranged the cells of the monks, their kitchen, refectory, and all the necessary offices of the convent. These are generally placed against the outer wall, and open into the court.

Any person familiar with the rock-cut examples in India will easily recognise in this temple all the features he is accustomed to in the earlier Chaityas and Viharas, though strangely altered by their Chinese disguise. The figure which stood in front of the dagoba (Woodcut No. 61) is moved forward and placed on an altar by itself, with two companions added, in accordance with modern Chinese theology; but the general arrangements remain the same. The most interesting part, however, is the arrangement of the cells, &c., relatively to the temple. In one of the caves at Dhumnar (Bhim ka Bazar) something like this has been attempted, but it is evidently so difficult of execution in the rock, that we are not surprised to find it not repeated. It is evidently what was intended to be represented on the central rath of Mahavellipore (Woodcut No. 181), and must indeed have been the general arrangement of Buddhist ecclesiastical establishments. What is now wanted is, that some one should supply information regarding the earlier temples of the Chinese, say of the 12th to the 16th centuries. They no doubt exist, and would throw great light on the earlier Indian examples. In the meanwhile, however, it is curious to refer back to the Woodcut No. 129. From it it will be perceived that as early as the 11th century the Buddhist Chaitya in India, standing in the centre of its Vihara, had already been sublimated into an idol temple, surrounded by a series of idol niches, since there cannot be a doubt that the Jaina temple of Vimala Sah is a reproduction for another purpose of an old Buddhist monastery. The curious point is, that the 18th-century temple of Honan reproduces, for their original purpose, forms which in India had, seven centuries earlier, passed away to another faith, and became wholly conventional. It is still more strange that, if we leap over the intermediate period, and go seven centuries further back, we shall find in India the same ceremonies performed in the same form of temples as those at which any one may assist in China at the present day.

At Peking there are several Lamaseries or Buddhist monasteries, of a much more monumental character than that at Honan, but it is very difficult indeed to guess at their arrangement from mere verbal

descriptions without dimensions. The gateway of one, represented in Woodcut No. 380, gives a fair idea of the usual mode of constructing gateways in China.

It has three openings of pleasing proportions, and is as well designed as any to be found in China. Behind it is to be seen the dagoba, to which it leads: a tall form, with a reverse slope, and an



380. Monumental Gateway of Buddhist Monastery, Pekin. (From a Photograph by Beato.)

exaggerated tee, so altered from those we are accustomed to in the earlier days of Indian architecture, that it requires some familiarity with the intermediate forms in Nepal and Burmah to feel sure that it is the direct lineal descendant of the topes at Sanchi or Manikyala. Around it are minarets, with a cross-legged seated figure of Buddha

on each face. But without a plan or description it is impossible to say whether they come down to the ground, or on what kind of basement they rest.

The ordinary form of a temple, as seen in the villages or towns in China, is extremely simple, and seems to be the same, whether dedicated to Buddha, or to the Queen of Heaven, or to any other deity of the strange pantheon of the Celestial Empire. It generally consists of a square apartment with a highly ornamented roof, and with one of the side-walls removed. The entrance is never at the end, nor the end wall ever removed, as would be the case in the West, but always the side: and it is by no means clear that this is not the right and



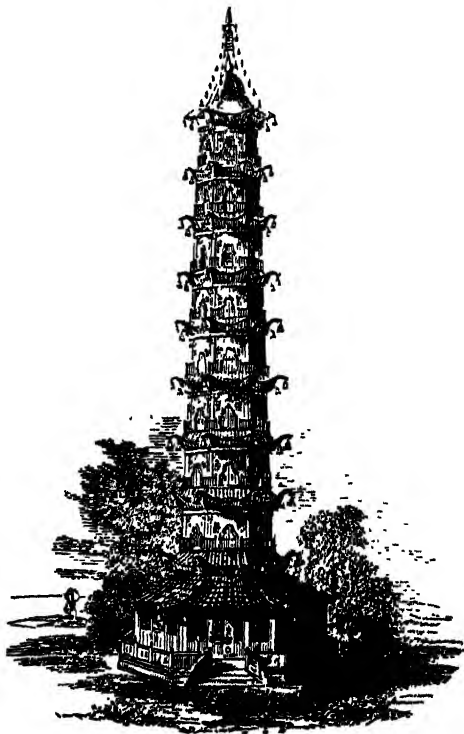
Temple at Macao. (From a Sketch by the Author.)

reasonable way of arranging matters. In very small temples a single beam supports the eaves, and a screen inside forms the back of the porch and the front of the temple. In larger temples two or more pillars are introduced, but the other arrangements remain the same. Both these may be seen in the annexed woodcut (No. 381), and when arranged as picturesquely as in this group, and with their gateways and subsidiary adjuncts, they become very pleasing features in the landscape. As architectural objects, they depend for their effect principally on colour, which is applied with an unsparing hand in the form of glazed tiles, painted ornaments, and frequently also paintings, such as landscapes and figure subjects. Gilding is also employed to a great extent, and with good effect.

TAAS.

The objects of Chinese architecture with which the European eye is most familiar are the taas, or nine-storeyed pagodas, as they are usually called. In the south they generally have that number of storeys, but not always, and in the north it ranges from three to thirteen. As before hinted, these are nothing but exaggerated tees of dagobas, and it is easy to trace them through all the stages of the change. In India we can easily trace the single wooden chattah or umbrella of Karli (Woodcut No. 56) to the nine-storeyed tower at Chittore (Woodcut No. 148), and from that the transition is easy to the Chinese examples, although the elaboration of the two was simultaneous, and the Chinese had probably erected tall towers as early as the Jains.

Of those which existed in China in our own time the best known is the celebrated porcelain tower at Nankin.¹ Commenced in the year 1412, and finished in 1431, it was erected as a monument of gratitude to an empress of the Ming family, and was, in consequence, generally called the Temple of Gratitude. It was octagonal in form, 236 ft. in height, of which, however, about 30 ft. must be deducted for the iron spire that surmounted it, leaving little more than 200 ft. for the elevation of the building, or about the height of the Monument of London. From the summit of the spire eight chains depended, to each of which were attached nine bells, and a bell was also attached



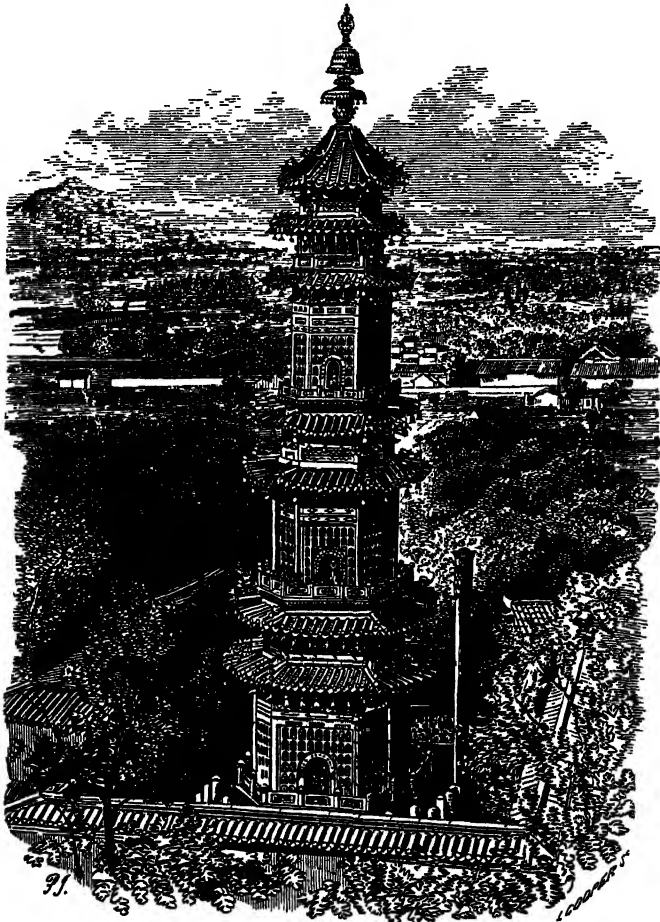
382.

Porcelain Tower, Nankin.

to each angle of the lower roofs, making 144 bells in all, which,

¹The tower was destroyed in the recent Taeping rebellion.

when tinkling in harmony to the evening breeze, must have produced an effect as singular as pleasing. It was not, however, either to its dimensions or its bells that the tower owed its celebrity, but to the coating of porcelain which clothed its brick walls, as well as the upper and under sides of the projecting roofs, which mark the division of each storey. The porcelain produced a brilliancy of effect which is totally lost in all the representations of it yet published, but which was, in fact, that on which the architect almost wholly relied for producing the effect he desired, and without which his design is a mere skeleton.

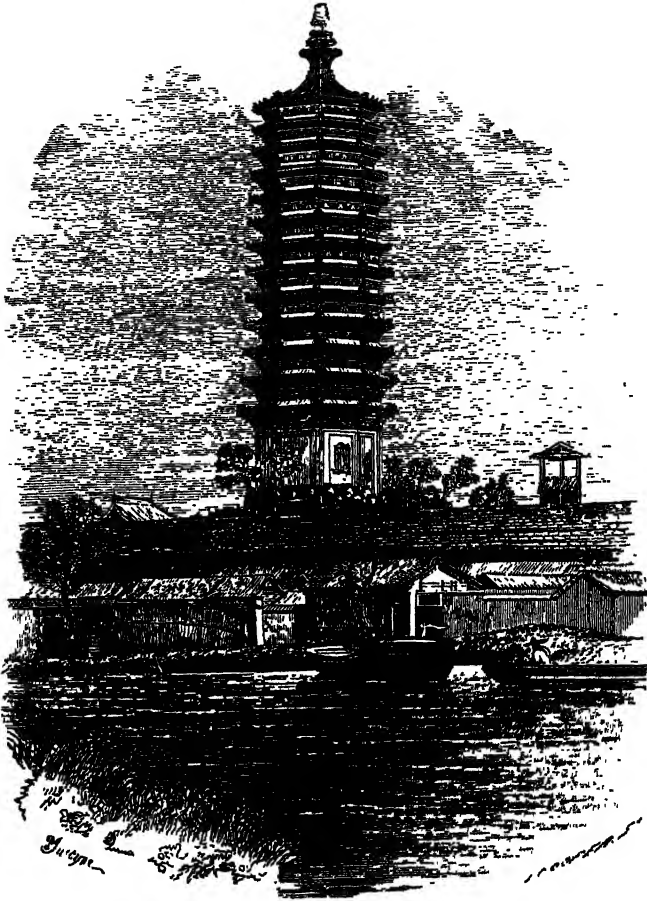


383. Pagoda in Summer Palace, Peking. (From a Photograph by Beato.)

Another celebrated pagoda is that known as "Second Bar Pagoda," on the Canton river. It is a pillar of victory, erected to commemorate a naval battle which the Chinese claim to have gained near the spot.

It is, in design, nearly identical with that of Nankin, but of smaller dimensions, and is now fast falling to ruin.

These two are of the usual and most typical form, and so like hundreds of others, that it is impossible to deduce any sequence from them with such representations as we now possess. Though pleasing and purposelike, as well as original, they are somewhat monotonous



in design. A tower divided into nine equal and similar storeys is a very inferior design to that of the minars of the Mahomedans, or the ordinary spires of Christian churches; and, if all were like these, we should be forced to deny the Chinese the faculty of invention in architecture. In the north, however, the forms seem much more various. One in the Summer Palace (Woodcut No. 383) is divided into either three or seven storeys, as you choose to count them. Four

of the sides of the octagon are longer than the other four, and altogether there is a play of light and shade, and a variety about the ornaments in this tower, which is extremely pleasing. It is much more like an Indian design than any other known in China, and with the circle of pillars round its base, and the *Lât* or *Stambha*, which usually accompany these objects further west, it recalls the original forms as completely as any other object in this country.

In direct contrast to this is the Pagoda of Tung Chow (Woodcut No. 384). Its thirteen storeys are almost more monotonous than those of the Nankin Pagoda; but they are merely architectural ornaments, string-courses, in fact; and as the tower is not pierced with windows above the base, it becomes, like an Orissan temple, an imposing object of architectural art without any apparent utilitarian object. It thus escapes the charge of littleness in design, which only too justly applies to most of its compeers.

It is extremely difficult to form a correct estimate of the artistic merits of these towers. Edifices so original and so national must be interesting from that circumstance alone, and it seems almost impossible to build anything in a tower-like form of great height, whether as a steeple, a minar, or a pagoda, which shall not form a pleasing object from its salience and aspiring character alone, even without any real artistic merit in itself. Besides these qualifications, I cannot but think that the tapering octagonal form, the boldly-marked divisions, the domical roof, and general consistence in design and ornament of these towers, entitle them to rank tolerably high among the tower-like buildings of the world.

TOMBS.

Like all people of Tartar origin, one of the most remarkable characteristics of the Chinese is their reverence for the dead, or as it is usually called, their ancestral worship. In consequence of this, their tombs are not only objects of care, but have frequently more ornament bestowed upon them than graces the dwellings of the living.

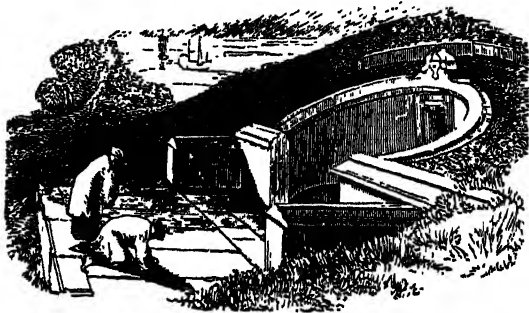
Their tombs are of different kinds; often merely conical mounds of earth, with a circle of stones round their base, like those of the Etruscans or ancient Greeks, as may be seen from the woodcut (No. 385) borrowed from Fortune's 'China'—which would serve equally well for a restoration of those of Tarquinia or Vulci. More generally they are of a hemispherical shape, surmounted with a spire, not unlike the Indian and Ceylonese examples, but still with a physiognomy peculiarly Chinese. The most common arrangement is that of a horseshoe-shaped platform, cut out of the side of a hill. It consequently has a high back, in which is the entrance to the tomb, and slopes off to nothing at the entrance to the horseshoe, where the



385.

Chinese Grave. (From Fortune's 'Wanderings in China.')

wall generally terminates with two lions or dragons, or some fantastic ornament common to Chinese architecture. When the tomb is situated, as is generally the case, on a hillside, this arrangement is not only appropriate, but elegant. When the same thing is imitated on a plain, it is singularly misplaced and unintelligible. Many of the tombs are built of granite, finely polished, and carved with a profusion of labour that makes us regret that the people who can employ the most durable materials with such facility should have so great a predilection for ephemeral wooden structures.



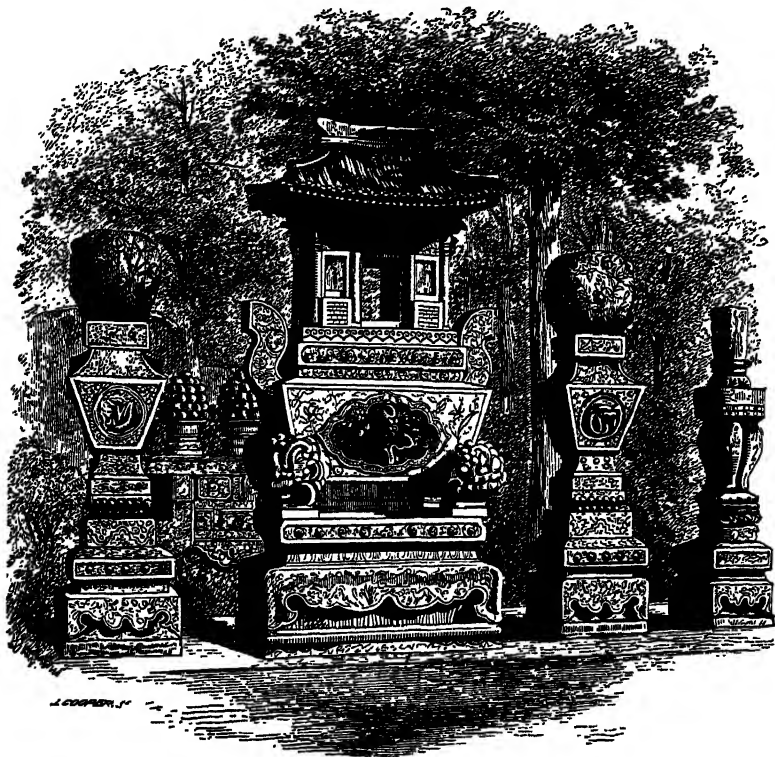
386.

Chinese Tomb. (From Fortune's 'Wanderings in China.')

When the rock is suitable for the purpose, which, however, seems to be rarely the case in China, their tombs are cut in the rock, as in Etruria and elsewhere; and tombs of the class just described seem to be a device for converting an ordinary hillside into a substitute for the more appropriate situation.

Occasionally, however, the Chinese do erect tombs, which, though ornamental, are far from being in such good taste as the two forms just quoted. A tumulus is considered appropriate for this purpose all

the world over, and so is the horseshoe form under the circumstances in which the Chinese employ it; but what can be said in favour of such an array of objects as those shown in the Woodcut No. 387? Judged by the standard of taste which prevails in China at the present day,



387.

Group of Tombs near Pekin. (From a Photograph by Beato.)

they may be considered by the natives as both elegant and ornamental, but it would be difficult to conceive anything which spoke less of the sepulchre, even from a Chinaman's point of view; while, on the other hand, their dimensions are such as to deprive them of all dignity as architectural objects.

PILLOOS.

The Pilloos, or "triumphal gateways," as they are most improperly called, are another class of monument almost as frequently met with in Chinese scenery as the nine-storeyed pagodas, and consequently nearly as familiar to the European eye. Their origin is as distinctly Indian as the other, though, from their nature, being easily overthrown, but few examples can be found in a country that has so long ceased to be Buddhist. Fortunately, however, we still possess in the

gateway of Sanchi (Woodcut No. 10) the typical example of the whole class; and we find them afterwards represented in bas-reliefs and in frescos in a manner to leave no doubt of the frequency of their application.

In China they seem almost universally to be employed as honorific monuments of deceased persons—either men of distinction, or widows who have not married again, or virgins who have died unmarried. Frequently they are still constructed in wood, and when stone is used they retain to this hour the forms and details of wooden construction. Whatever the material, they consist of either two or four posts, set either on the ground, so as to allow a passage through, or on a platform, as in Woodcut No. 388. This is as usual a form as the other, and shows how inapplicable the term gateway is to these monuments. The posts always carry a rail or frieze, bearing an inscription, which is, in fact, the object for which the monument was



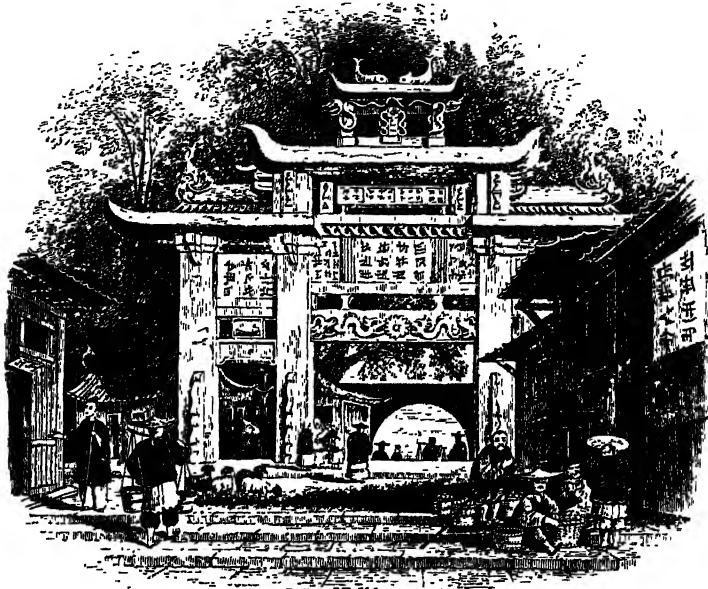
388. Paifoo near Canton. (From a Sketch by the Author.)

erected. Above this are various architectural details, which complete the design in a manner both original and artistic.

One serving as the portal to a dagoba has already been given (Woodcut No. 380), and though rich, can hardly be considered as superior to that in Woodcut No. 389, which spans a street in Amoy. Instead of leading to a dagoba, as was the case at Sanchi, and generally in India, we have, in this instance, what appears to be a simulated coffin placed under a canopy, and above the principal cornice, which is an essentially Chinese idea. With them a handsome coffin is an object of the highest ambition, and is, consequently, a luxury which the rich take care to provide themselves with during their lifetime. So far as we know, no great structural dagobas ever existed in China, so that their form is generally unfamiliar to the people.

Probably the Chinese would have spent more pains on their tombs had they not hit on the happy device of separating the monument from the sepulchre. We do so in exceptional cases, when we erect statues and pillars or other monuments to our great men on hill-tops or in

market-places; but as a rule, a man's monument is placed where his body is laid, though it would probably be difficult to assign a good logical reason for the practice. The great peculiarity of China is that in nine cases out of ten they effect these objects by processes



which are exactly the reverse of those of Europe, and in most cases it is not easy to decide which is best. In erecting the Pailoo, or monument, in a conspicuous place apart from the sepulchre, they seem to have shown their usual common sense, though an architect must regret that the designs of their tombs suffered in consequence, and have none of that magnificence which we should expect among a people at all times so addicted to ancestral worship as the Chinese.

In an historical point of view, the most curious thing connected with these Pailoos seems to be, that at Sanchi, about the Christian Era, we find them used as gateways to a simulated tomb. In India both the tumulus and the Pailoo had at that time passed away from their original sepulchral meaning; the one had become a relic-shrine, the other an iconostasis. Two thousand years afterwards in China we find them both still used for the purposes for which they were originally designed.

DOMESTIC ARCHITECTURE.

It is in their domestic architecture, if in any, that the Chinese excel; there we do not look either for monumental grandeur or for

durability, and it is almost impossible to resist being captivated by the gaiety and brilliancy of a Chinese dwelling of the first class, and the exuberant richness and beauty of the carvings and ornaments that are heaped on every part of it.

One of the most remarkable peculiarities of their houses is the almost universal concave form of roof, which writers on the subject have generally referred to as a reminiscence of the tent of the Tartars, who are supposed to have introduced it. The authors of this theory, however, forgot that the Chinese have been longer out of tents, and know less of them, than any other people now on the face of the globe. The Tartar conquest, like our Norman one, has long been a fusion rather than a subjection, and does not seem to have produced any visible effect on the manners or customs of the original inhabitants of China. It may also be observed that the typical form of the roof of a Tartar tent was and is domical, like those represented in the Assyrian sculptures, and seldom, if ever, constructed with a hollow curve; so that the argument tells the other way. Be this as it may, the form of roof in question arose from a constructive exigence, which others would do well to imitate. In a country like China, where very heavy rains fall at one season of the year, tiled roofs, such as they almost universally use, require a high pitch to carry off the water; but the glaring sunshine of another season renders shade to walls and windows absolutely necessary. If (as on the left of the annexed diagram) the slope of the roof is continued so far out as to be effective for the last purpose, the upper windows are too much darkened, and it is impossible to see out of them. To remedy this defect, the Chinese carry out their eaves

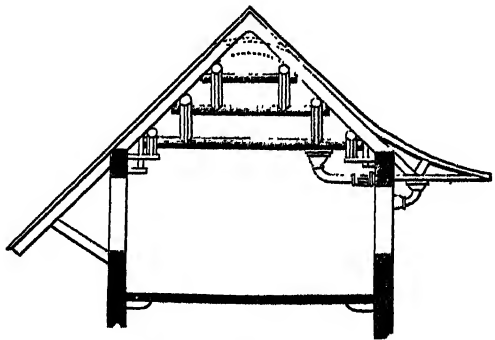


Diagram of Chinese construction.

almost horizontally from the face of the walls, where a leak becomes of slight importance; and then, to break the awkward angle caused by the meeting of these two slopes, they ease it off with a hollow curve, which not only answers the double purpose of the roof more effectually, but produces what the Chinese think—and perhaps rightly—the most pleasing form of roof.

The only parts of such a roof that admit of decoration by carving are evidently either the central or angular ridges; and here they exaggerate their favourite hollow curve to an extent unpleasing to a

European eye—the angles being, in some instances, actually turned back, and the ridge being also ornamented by upturned ornaments at its ends, to an extent we cannot reconcile with our notions; nor indeed is it possible we should, when they are overloaded with grotesque ornaments to the extent too often found.

Another peculiarity that gives a very local character to their architecture is their mode of framing a roof, so unlike that of any other people. This arises from the timber most easily available for the purpose being a small pine, which has the peculiarity of being soft and spongy in the inside, while the outer rims of wood, just under the bark, retain their hardness and strength; it is thus practically a hollow wooden cylinder, which, if squared to form a framing as we do, would fall to pieces; but merely cleaned and used whole, it is a very strong and durable building-material, though one which requires all a Chinaman's ingenuity and neatness to frame together with sufficient rigidity for the purposes of a roof.

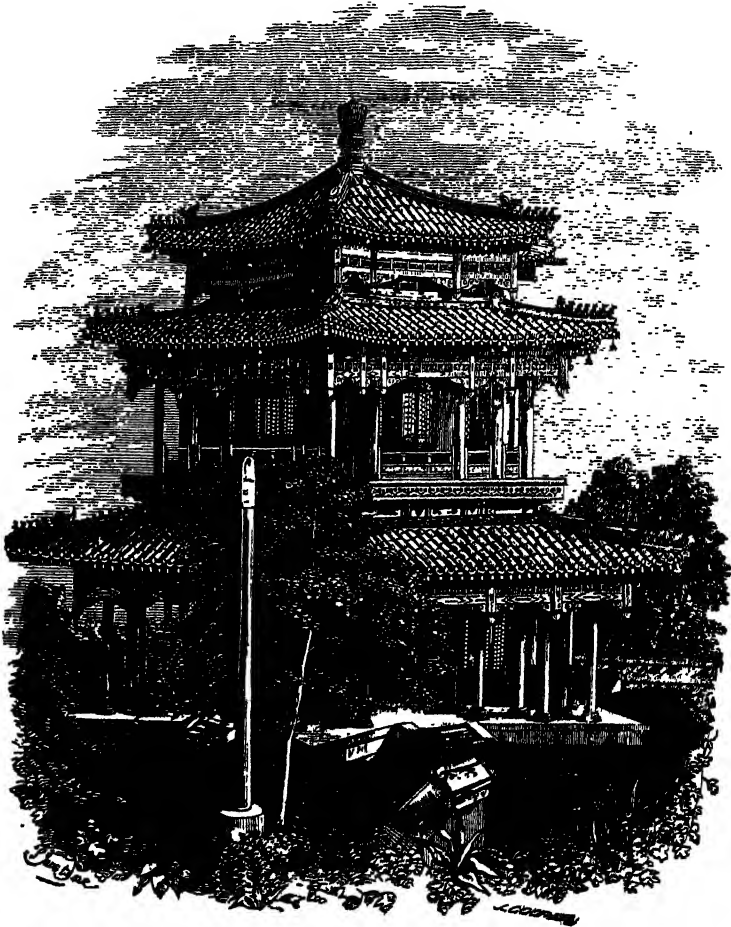
The uprights which support these roofs are generally formed of the same wood, though not unfrequently they are granite posts—they cannot be called pillars—of the same dimensions, and strengthened, or rather steadied, by transverse pieces of wood, the space between which and the roof is generally filled with open-work carving, so as to form a species of frieze.

The roof is usually constructed (as shown in diagram No. 390) by using three or four transverse pieces or tie-beams, one over the other, the ends of each beam being supported on that below it by means of a framed piece of a different class of wood. By this method, though to us it may look unscientific, they make up a framing that resists the strongest winds uninjured. Sometimes, as shown in the dotted lines of the same woodcut, they carry the curve across the top of the roof; but, when this is done, they are obliged to have recourse to metal roofing, or to tiles of a greater length than are usually found or easily made.

As before remarked, however, it is not so much on its forms that Chinese architecture depends as on its colours—the pillars being generally painted red, the friezes and open work green; blue marks the floors and stronger lines, and gilding is used profusely everywhere. Whether this would improve a finer or more solid style of art may admit of doubt; but it is certainly remarkably pleasing in China, and singularly appropriate to the architecture we have been describing; and grouped as these buildings usually are around garden courts, filled with the gayest flowers, and adorned with rock-work and fountains more fantastic than the buildings themselves, the fancy may easily be charmed with the result, though taste forbids us to approve of the details.

The same ephemeral system of construction which prevailed in

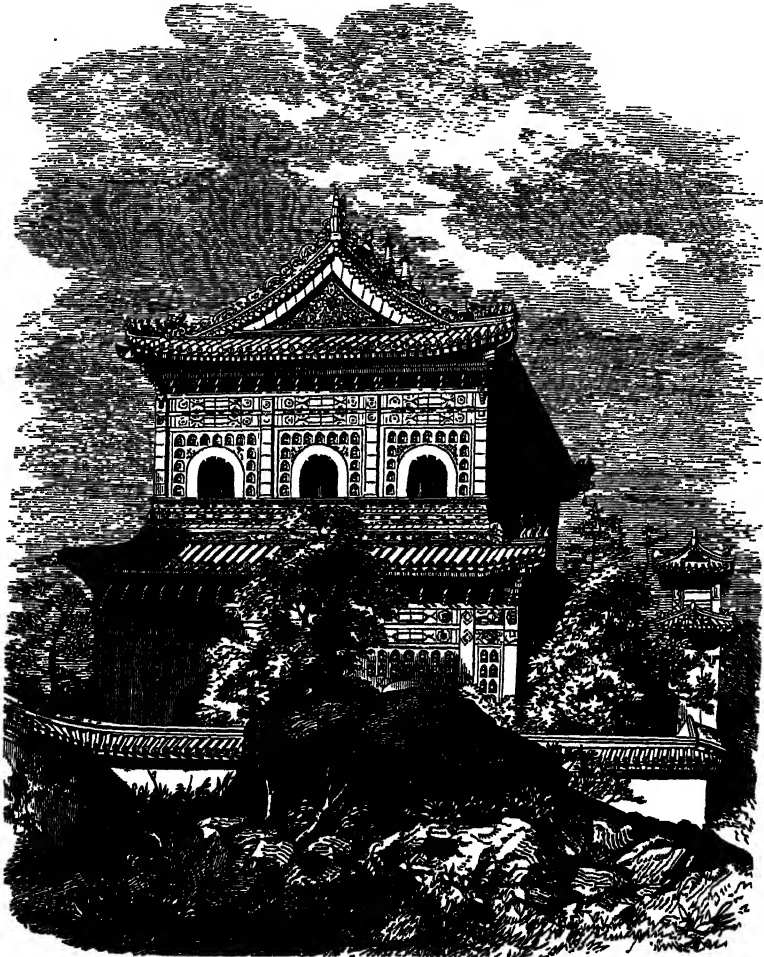
dwelling of the rich merchants and mandarins was carried out in the royal palaces without any increase of monumental character, but, of course, with greater richness of ornament, and upon a larger scale. Like most Oriental palaces, however, those at Peking consist of a number of detached pavilions, rather than of numerous suites of apartments grouped under one roof, as is usually the case in Europe :



391. Pavilion in the Summer Palace, Peking. (From a Photograph by Beato.)

and they consequently never attain the magnitude essential to architectural dignity. In the Summer Palace at Peking there were many detached pavilions similar to that represented in Woodcut No. 391, which, when interspersed with trees and water and rocky scenery, aid in making up a very fairy-like landscape, but in themselves can hardly be considered as objects of dignified architecture.

Occasionally, however, the Chinese attempted something more monumental, but without much success. Where glass is not available of sufficient size and in sufficient quantities to glaze the windows, there is a difficulty in so arranging them that the room shall not be utterly dark when the shutters are closed, and that the rain shall not penetrate when they are open. In wooden construction these difficulties

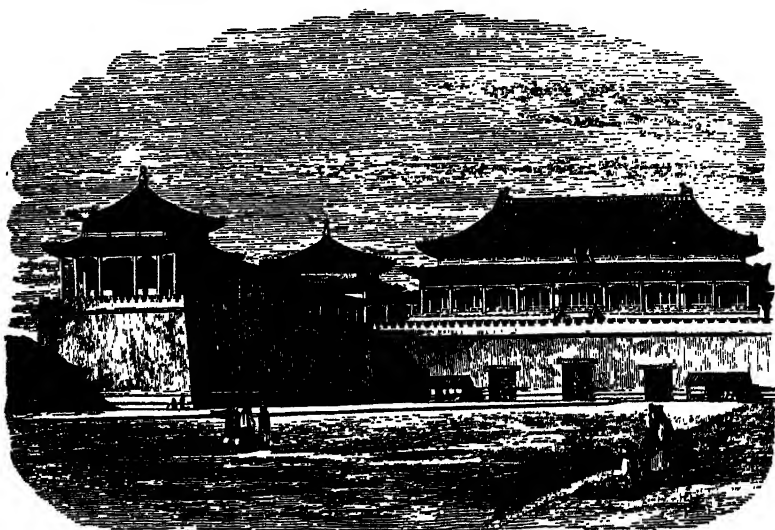


392. Pavilion in the Summer Palace, Pekin. (From a Photograph by Beato.)

are much more easily avoided ; deep projecting eaves, and light screens, open at the top, obviate most of them : at least, so the Chinese always thought, and they have consequently so little practice, that when they tried solid architecture in a palace they could only produce such a pavilion as that figured in Woodcut No. 392, which, though charac-

teristic of the style, cannot be praised either for the elegance of its form or the appropriateness of its ornamentation.

Perhaps their most successful efforts in this direction were when they combined a solid basement of masonry with a light superstructure of wood, as in the Winter Palace at Peking (Woodcut No. 393). In this instance the height and solidity of the basement give sufficient dignity to the mass, and the light superstructure is an appropriate termination upwards.



333.

View in the Winter Palace, Peking. (From a Photograph.)

This last illustration is interesting, because it enables us to realise more distinctly than any other example yet known, what must have been the effect of the palaces of Nineveh and Khorsabad in the days of their splendour. Like this palace, they were raised on a solid basement of masonry, and were themselves composed of pavilions of light and ornamental woodwork; the great difference being that they had flat-terraced roofs instead of those covered with tiles, as in snowy Peking; but the resemblance is curious, and examples even more nearly akin might probably be found if looked for.

The engineering works of the Chinese have been much extolled by some writers, but have less claim to praise as works of science than their buildings have as works of art. Their canals, it is true, are extensive; but with 300 millions of inhabitants this is small praise, and their construction is-most unscientific. Their bridges, too, are sometimes of great length, but generally made up of a series of small arches constructed on the horizontal-bracket principle, as nine-tenths of the bridges in China are, and consequently narrow and unstable.

When they do use the true arch, it is timidly, and without much knowledge of its principles.

Their most remarkable engineering work is certainly the Great Wall, which defends the whole northern frontier of the country, extending over hill and dale for more than 1200 miles as the crow flies. It is, however, of very varying strength in different places, and seems to be strongest and highest in the neighbourhood of Pekin, where it has generally been seen by Europeans. There it is 20 ft. in height, and its average thickness is 25 ft. at the base, tapering to 15 ft. at the summit. There are also towers at short distances whose dimensions are generally about double those just quoted for the wall.

However absurd such a wall may be as a defensive expedient, it proves that 200 years B.C. the Chinese were capable of conceiving and executing works on as great a scale as any ever undertaken in Egypt. The wonder is, that a people who 2000 years ago were competent to such undertakings should have attempted nothing on the same scale since that time. With their increasing population and accumulating wealth we might have expected their subsequent works to have far surpassed those of the Egyptians. It, however, remains a problem to be solved, why nothing on so grand a scale was ever afterwards attempted.

In the rear of the Great Wall, in the Nankau Pass, there is an archway of some architectural pretension, and which is interesting as having a well-ascertained date, A.D. 1345.¹ Its dimensions are considerable, and it is erected in a bold style of masonry (Woodcut No. 39±). The upper part is a true arch, though it was thought necessary to disguise this by converting its form into that of a semi-octagon, or three-sided arch. On the keystone is a figure of Garuda, and on either side of him a Naga figure, with a seven-headed snake hood, and beyond that a class of flowing tracery we are very familiar with in India about the period of its erection. Its similarity to the Nepalese gateway at Bhatgaon (Woodcut No. 174) has already been remarked upon, and altogether it is interesting, as exemplifying a class of Indian ornamentation that came into China from the North. If we had a few specimens of art penetrating from the south, we might find out the secret of the history of Buddhist art in China.

A few years hence it may be possible to attempt to write a history of architecture in China. At present, all that can be done is to describe the style as practised at the present day, and to point out in what respect it differs from the styles prevailing in neighbouring countries. Beyond this we shall not be able to advance till some

¹ 'Journal of the Royal Asiatic Society,' vol. vii. p. 331 (N.S.), vol. v. p. 14, *et. seqq.*



394.

Archway in the Nankau Pass. (From a Photograph.)

qualified person, accompanied by a photographer, is enabled to visit the central and western provinces of the empire. Even then his visit will be of very little use, unless he is sufficiently familiar with the style as now known, to be able to discriminate between what is new and what is old, and by an extended series of inductions to check the absurdities of native tradition, and form his own opinion on the facts presented to him. Assuming all this, it is still doubtful whether the materials exist in China for any extended history of the art. Such facts as have come to light are not encouraging. Wood has been far too extensively used throughout for any very permanent style of architecture ever having been employed. But there are things in Cambodia, and other neighbouring states, which seem to have come neither from India, nor from any other country we are acquainted with, but are nevertheless of foreign origin, and must have been imported from some extraneous land; and it is difficult to say where we are to look for their originals if not in central or western China.

The same remarks apply to Japan. So far as our knowledge at present extends, there is not a single permanent building in the

island of so monumental a character to deserve being dignified by being classed among the true architectural examples of other countries. It may be that the dread of earthquakes has prevented them raising their buildings to more than one or two storeys in height, or constructing them of more solid materials than wood. It may be, however, that the Japanese do not belong to one of the building races of mankind, and have no taste for this mode of magnificence. It is the same story as in China; we shall not know whether it is true that there are no objects worthy to be styled architecture in Japan till the island is more scientifically explored than it has been; nor, if they do not exist, shall we till then be able to say to which of the two above causes their absence is to be ascribed. Such information as we have is very discouraging; and it is to be feared that, though quaint and curious in itself, and so far worthy of attention, it is of little interest beyond the shores of the islands themselves. On the other hand, it is to be feared that the extent of our knowledge is sufficient to make it only too clear that the art, as practised in Japan, has no title to rank with that already described in the preceding pages, and consequently no claim to a place in a general history of architectural art.

However admirable and ingenious the modern Chinese may be, it is in the minor arts—such as carving in wood and ivory, the manufacture of vessels of porcelain and bronze, and all that relates to silk and cotton manufactures. In these they certainly excel, and reached a high degree of perfection while Europe was still barbarous, but in all the higher branches of art they take a very low position, and seem utterly unprogressive.

They have no poetry, properly so called, and no literature worthy of the name. Their painting never rose much above the scale of decoration, their sculpture is more carving than anything we know by the higher name, and their architecture stands on the same low level as their other arts. It is rich, ornamental, and appropriate for domestic purposes, but ephemeral and totally wanting in dignity and grandeur of conception. Still it is pleasing, because truthful; but after all, its great merit in the eyes of the student of architecture will probably turn out to rest on the light it throws on the earlier styles, and on the ethnographic relations of China to the surrounding nations of Eastern Asia.

APPENDIX.

APPENDIX A.

ON SOME DISPUTED POINTS OF INDIAN CHRONOLOGY.

THROUGHOUT the preceding pages the dates of kings' reigns, where quoted, have been assumed as known, and the eras from which they are calculated as ascertained. This has been done in order not to interrupt the narrative of events by introducing a chronological disquisition at every point where a date occurs; but no one at all familiar with the subject needs to be told that the dates of mediæval dynasties in India are far from settled, and that few are universally acquiesced in. Great progress has, it is true, been made in the last ten or twenty years in clearing away the difficulties that surround the subject. So much is this the case, that there are only one or two dates of sufficient importance to affect our reasoning which still remain in doubt; but though this may be true, there are many others about which the world in general feel considerable hesitation. It consequently becomes almost indispensable to state briefly the grounds on which the chronology used throughout this work is based, in order that the correctness of most of the inductions stated in it may be estimated at their true value.¹

The earliest reasonable statement bearing on the subject which we is in the 9th chapter of Arrian's 'Indica.' It is there stated—quoting from Megasthenes—"That from Bacchus (Ixwaku) to Sandrocottus (Chandragupta), the Indians reckon one hundred and fifty-

¹ In the year 1870 I published in the 'Journal of the Royal Asiatic Society' (N.S.), vol. iv. p. 81, *et seq.*, an article on Indian chronology, in which my views on the subject were stated at greater length and more detail than it is proposed to do here. Being addressed to those who were supposed to be more or less familiar with the subject, the paper took the form of an argument, rather than of a statement, and is, consequently, difficult to follow by those to whom the subject is new. The following is an abstract of that paper, with such corrections as have occurred to me in the meanwhile, and stated in a consecutive form, and with only those details that seem necessary to render it intelligible. For further particulars on special points the reader is referred to the article itself.

three monarchs, who reigned during the space of six thousand and forty-two years."

The first part of this statement is eminently satisfactory, as it seems clear from it that we possess in the Puranas the same lists as were submitted to the Greeks in the fourth century B.C. In the Solar lists, we have in the Treta Yug sixty-two reigns, from Ixwaku to Rama.¹ There is no complete Lunar list in that age. For the Dwapar age we have three Solar lists: one for Kusha to Vrihadsana, thirty-five reigns; another from Dishta to Janamejaya, thirty-three reigns; and a third, from the son of Swadhaja, the father of Sita, wife of Rama, to Mahabasi, thirty-four reigns. In the Kali Yug we have no complete Solar list, but the Lunar list gives fifty descents from Jara-sandha to the last Nanda. This gives 145 or 146 reigns, or rather too few. But the Lunar lists, from the Dwapar Yug, give forty-four from Puru to Yudhishihira, and fifty from Yadu to Krishna, so that the average is as nearly as may be that stated by Megasthenes.

The second part of the statement, giving these kings' reigns an average duration of nearly forty years, must of course be rejected, but it is satisfactory to find that, at that early age, the falsification of the chronology had only gone to the extent of duplication, and that the monstrous system of Yugs, with all their attendant absurdities, had not then been invented.

Though it may not at present be capable of direct proof, I have myself no doubt that the date assigned by the Hindus for the Kali Yug (3101 B.C.) is a true date, though misapplied. It either was the date when the Aryans assumed that their ancestors had first crossed the Indus, or when they had first settled on the banks of the Saraswati or the Ghoghra. It forms no part of any subsequently invented system, and seems the only one fixed point in a sea of falsification. Assuming it for the present, and deducting Chandragupta's date from it, we have $3101 - 325 = 2776$ years from Ixwaku to Chandragupta, which, divided by 153, gives the reasonable number of eighteen years for the duration of each king's reign. Of course it is not contended that these lists are absolutely to be depended upon—many names may be lost, and many misplaced, from the carelessness of copyists, or from other causes; but, on the whole, when treated in this manner, they afford a reasonable framework for the reconstruction of the ancient history of India, and one that accords perfectly with all we at present know about the ancient history of the immigrant Aryans.

¹ The lists used for this statement of pre-Buddhist chronology are those compiled by James Prinsep, and published in his 'Useful Tables' in 1836. They were afterwards revised and republished by Ed. Thomas, in his edition of Prinsep's

works, in 1858. In a regular treatise on chronology it would be indispensable to refer to the Puranas themselves; in a mere statement of results these tables are amply sufficient.

If this view can be sustained, the events which are described in the Ramayana—not of course the poem, which is comparatively modern—took place about 2000 years before Christ. Adhering to the above average, we gather that the events described in the ‘Mahabharata,’ in like manner, occurred 900 years before Chandragupta, or 1225, or more precisely, according to the Puranic chronology, thus—

	B.C.
Chandragupta	325
Sisunagas, 360 years	360
Sunakas	128
Saladeva to Bipunjaya, 23 reigns at 18 years	414
	<hr/> 1227 <hr/>

which may probably be taken as very near the true date.

It must for the present remain an open question whether the dates just quoted can be so established as to stand the test of the exigencies of modern critical acumen. It would be very satisfactory if this could be so accomplished. In the first place, because it would afford a firm basis for all our reasoning regarding the ancient history and ethnography of India, but also because it would prove that the Puranas do contain the germs of truths which, when properly investigated, may lead to the most important deductions. My own impression is entirely in favour of the existence of the requisite materials for the purpose; but the fashion has been lately to pooh-pooh the whole thing, and no attempt has been made—so far as I know—by any competent scholar, to investigate the matter on scientific principles.

Be this as it may, when we come to the Anjana era, 691 B.C.,¹ and the life of Buddha, we tread on surer ground; and it is fortunate for our purposes that it so, as with the life of Buddha the mediæval history of India may be said to commence, and unless his date and that of his successors can be established with at least approximate certainty, the history of architecture in India must remain unintelligible. In this instance, however, the materials, I believe, exist in abundance. They have not, it is true, been as yet investigated to such an extent as to render any point certain, but the difficulties are daily disappearing, and as every point gained adds materially in throwing light on others that have hitherto been considered unsettled, we may hope before long to see the whole satisfactorily resolved.

There is perhaps no single point in the whole early history of India on which the chronicles of Ceylon and Further India are so distinct and unanimous than that Buddha died—as they express it,

¹ Crawford's ‘Embassy to Ava,’ vol. ii. p. 274.

attained Nirvana—at the age of eighty years, in the year 543 B.C., or in the year 149 of the Eetzana¹ or Anjana epoch.²

Attempts have recently been made, it appears to me on the most illogical and insufficient data, to invalidate this conclusion. There is an admitted falsification in the Ceylonese annals, as set forth in the 'Mahawanso,' of sixty years about this date; but as Turnour, who first pointed it out, explained also the reason for it,³ the rectification is easy, and the result clear. It seems that Vijaya, the first Indian immigrant or conqueror of Ceylon, landed in the island 483 years B.C., or thereabout; and the reigns of his successors, down to Devenampiyatisso, the contemporary of Asoka, when added together, amount to only 236 years. When the annals came to be expounded in the 'Mahawanso,' it was thought expedient, for the good of religion, that the coming of Vijaya should be coincident with the death of Buddha; and as the sacred era could not be disturbed, Asoka's reign was carried back so as to admit of the adjustment. This was effected principally by reducing the epoch of the nine Nandas from 100 years, at which the Puranas place them, to forty-four, and by other slight alterations. The sixty years was afterwards recovered by small increments to subsequent reigns, not of much consequence, but injuriously affecting the correctness of the whole chronology of the 'Mahawanso,' down to about A.D. 400, when it was compiled in its present form. As the date of Asako's reign is perfectly well known (272–236 B.C.), we have only to reject the most improbable coincidence of Vijaya landing on the day of Buddha's Nirvana, which there is nothing to support, and the whole becomes clear, and everything falls into its place.⁴

Besides the Ceylonese lists, and those quoted by Crawford from the Burmese annals,⁵ the Puranas afford us two, quoted below, which are of great interest to us, and the whole are so marvellously coincident, that there seems very little doubt of their general authenticity.

¹ Bigaulets 'Life of Gaudama,' p. 323.

² 'Embassy to Ava,' loc. cit.

³ 'Journal of the Asiatic Society of Bengal,' vol. vi. p. 715.

⁴ Unfortunately the Chinese annals, to which we generally look for assistance in our difficulties, are not likely to afford us any in this. Confucius was born 551 B.C., and died 478; he was consequently only eight years old when Buddha died, and in order to give Buddha the necessary precedence in date, the Buddhists boldly added five centuries to this, placing him about 1000 B.C. This struggle between truth and falsehood led to such confusion

that in the 7th century Hiouen Thsang wrote: "Depuis le Nirvana jusqu'aujourd'hui les uns comptent 1200 ans, les autres 1500 ans: il y en a qui affirment qu'il s'est écoulé plus de 900, mais que le nombre de 1000 n'est pas encore complet." ('Histoire,' p. 131. 'Vie et Voyages,' l. 335.) The first is the nearest, according to our ideas. He was writing apparently in 1190 A.B. It may be 1200, if it was written after his return to China; but from this confusion it is evident no reliance can be placed on any dates he may quote from the Nirvana.

⁵ 'Embassy to Ava.' Appendix.

SOLAR LIST.		LUNAR LIST.	
		<i>Saisunaga Dynasty reigned 360 years.</i>	
	B.C.		B.C.
Kritanjaya	691	Sisunaga	685
Rananjaya	—	Kakavarna	—
Sanjaya	—	Kshemadharman	—
Sakya	—	Kshetrujas	—
Suddhodana	—	Bimbisara	603
		<i>Kanvapana, 9.</i>	
		<i>Bhumiputra, 14.</i>	
Ratula	—	Ajatasatru	551
Prasenajit	—	Udayaswa	519
Kshudraka	—	Dasaka	503
Kundaka	—	Nagadasoka	495
Suratha	—	Sisunaga	471
Sumitra	451?	Kalasoka	453
		Maha Nanda	425
		Sumalya	—
		7 Nandas	—
		<i>Interregnum Kautilya ending 325</i>	

With regard to the first or Solar list, Professor Wilson remarks, that "Sakya is no doubt the name of the author or reviver of Buddhism, but is out of place, as he was the son and not the father of Suddhodana."¹ This, however, is only one of the numerous instances in which the grandson takes his grandfather's name, and which is an interminable cause of confusion in Indian chronological inquiries.² Gautama, as we know, never ascended the throne, but devoted himself to his religious duties, but his son Ratula succeeded his grandfather. In like manner, the Prasenajit in the list is not the cousin and companion of Buddha, but the grandson, or grand-nephew of that earlier king of the same name. Sumitra, the last name mentioned in the Bhagavat Purana, seems to have ascended the throne about 451. There are no exact dates for fixing this event, and with him perished the long line of Solar monarchs, who for more than twenty-six centuries—if our chronology is correct—had influenced in so marked a manner the destinies of India.

It was during the reign of Kalasoka, the eleventh king of this dynasty, that the second convocation was held, 100 years after the Nirvana. This, too, it has recently become the fashion to doubt. The accounts, however, in the 'Mahawanso,' and the pointed mode in which it is referred to in the Burmese annals, seem sufficient to settle the point. Like Vijaya's landing in Ceylon on the day of Buddha's Nirvana, Prome is said to have been founded 443, the year of

¹ Vishnu Purana, p. 463.

² 'Journal of the Royal Asiatic Society,' vol. iv. (N.S.) p. 85.

this convocation.¹ They must have believed strongly, or they would not have attempted the adjustment.

As before mentioned, we have neither buildings, nor coins, nor inscriptions belonging to this period, nor indeed any material facts that would enable us to verify the chronological data. It is, however, so near the time when these became abundant, that it does not seem unreasonable to hope that some such evidences may turn up. Till something is found, the absence of all such materials must remain as a curious piece of evidence regarding the important influence that the contact of the nations of the West had on the arts and civilization of India at the time.

MAURYA, SUNGA, AND KANWA DYNASTIES.

CHRONOLOGY.	BUILDINGS.
<i>Maurya Dynasty, 130 years.</i>	
	B.C.
Chandragupta	325
Bimbisara	301
Asoka	276
Suyasa	240
Dasaratha	230 ?
Sangata	220 ?
Indrapalita	212 ?
Somasarman	210
Sasadharman	203
Vrihadratha	195
<i>Sunga Dynasty, 112 years.</i>	
Pushpamitra	188
Agnimitra	152
Sujyeshtha	144
Vasumitra	137
Badraka, or Ardraka	129
Pulindaka	127
Ghoshavasu	124
Vajramitra	121
Bhagavata	112
Devabhuti	86
<i>Kanwa Dynasty, 45 years.</i>	
Vasudeva	76
Bhumimitra	67
Narayana	53
Susarman	41
died	31

The chronology of these three dynasties, as recorded in the Puranas, may admit of some adjustment in detail; but the whole is so rea-

¹ Crawford's 'Embassy to Ava,' vol. ii. p. 277.

sonable and consistent that it can hardly be to any great extent. The whole, too, is now found to be so perfectly in accord with the architecture of their age, and with such inscriptions as have been found, that I see no reason whatever for doubting its general correctness.

The cardinal point on which the whole hinges is the twelfth year of Asoka's reign after his consecration—the sixteenth from his inauguration. In that year he published his rock-cut edicts, in which he mentions his allies, Antiochus and Antigonus, Ptolemy (Philadelphus), Magas (of Cyrene), and Alexander (of Macedonia).¹ As it happens, all these five names are mentioned together in Justin's abridgment of Trognus Pompeius (xxvi. 2, 3 and xxvii. 1), though without giving any date. As Magas, however, died B.C. 257, and the only year in which all five were alive together was either that year or the preceding, we may safely assume that the sixteenth of Asoka was B.C. 256 or B.C. 257. If that is so it seems impossible to bring down the date of the accession of Chandragupta to a time more modern than one or two years after B.C. 325. The Ceylonese annals allow him thirty-four years,² but our knowledge of what happened in India in Alexander's time forbids any such extension. On the other hand, his accession happening in the year, or the year after, the defeat of Porus, is not exactly what we would expect from the context; but there is nothing, so far as I know, to controvert it.

Even if it were not so certain as it appears to be from the statements just quoted, there can be no doubt that the chronology of this period can easily be settled from the numerous inscriptions found in the rock-cut excavations quoted in the table, as well as from coins and other materials that exist. These dynasties thus become a fixed starting-point for all our inquiries, either backwards or forwards.

ANDRA, OR ANDRABRITYA DYNASTY.

CHRONOLOGY.		BUILDINGS.
	B.C.	
Sipraka	31	
Krishna	A.D. 8	Cave at Nassick.
Satakarni I.	10	South gateway, Sanchi.
Purnot-anga	28	Caves 10 and 11 Ajunta.
Srivastami	46	

¹ 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 261; 'Journal of the Royal Asiatic Society,' vol. xii. p. 232; Cunningham's 'Archæological Reports,'

vol. v. p. 20, &c., &c.

² 'Journal of the Asiatic Society of Bengal,' vol. vi. p. 714.

ANDRA, OR ANDRABRITTA DYNASTY—*continued.*

CHRONOLOGY.	BUILDINGS.
Satakarni II. A.D. 64	Saka Era established A.D. 79.
Lambodara 120	Nahapana cave, Nassick.
Apitaka 138	
Sangha 150	
Satakarni III. 168	Rudra Dama, bridge inscription, A.D. 151.
Skandhaswati 186	
Mrigendra 193	
Kuntaluswati 196	
Swatikurna 204	
Pulomavit 205	
Gorakshaswasri 241	
Hala 266	
Mantalaka 271	
Purindra sena 276	
Sindara 381	
Rajadaswati 6 ms.	
Sivaswati 284	
Gautamiputra 312	Gupta Era established A.D. 319; cave at Nassick, outer rail Amravati.
<i>Vasithi putra</i> 333	
Pulomat 335	
Sivasri 363	
Skandaswati 370	
Yajnasri 377	Cave at Nassick.
Vijaya 406	Great cave Kenheri.
Chandrasri 412	
Pulomat 422	
" died 429	
or 436	Caves 16, 17, and 19 Ajunta.

For this dynasty, as for the preceding three, we are dependent on the Puranas; but its chronology, like theirs, is so reasonable and so consistent with what we learn from other sources that I see no reason whatever for doubting its general correctness. There are slight discrepancies of course, not only as to names but as to the duration of this dynasty in the different Puranas. Thus the Vishnu Purana, according to Wilson, enumerates thirty kings, reigning 456 years; the Vayu and Bhagavat the same. The Matsya gives only twenty-nine kings, but makes them reign 460 years; but none of them give all the names, nor does the addition of the longest list extend beyond 435 years.¹ The whole, from Chandragupta to the last, are also added together (p. 232), and make up 751 years, or bringing the last of the Andras down to A.D. 426. The actual fixation of these dates will probably be found in Nassick cave inscriptions. Two of these bear dates: one, apparently in the reign of Pulomavi,

¹ Wilson's 'Vishnu Purana,' Second Edition, vol. iv. p. 200; see also p. 232.

or Padma, is dated nineteen from an unspecified era ; the other is in the twenty-fourth year of the "modern era," and the act recorded is, apparently, by order of Gautamiputra.¹ As it is, however, almost certain that the Gupta era, A.D. 319, was established in the reign of the last-named king, it seems probable that when these inscriptions are more carefully examined than they hitherto have been, they will fix these reigns with even greater certainty than we obtain from the Puranic dates ; the one element of uncertainty being that the new era does not seem to be dated either from the accession of the king or from any great event, but four cycles of sixty years, or 240 years from the Saka era it was intended to supersede.²

However this may be settled, it cannot disturb either the initial or the final dates of this dynasty, nor affect to a greater extent than say ten or twelve years the period of 751, which extended from the accession of Chandragupta to the final overthrow of the Andras in or about A.D. 426.

This being so, it is evident that these four dynasties form the backbone of our mediæval chronology of India to which all minor events must be fitted, and fortunately most of them do so without any difficulty. It was the great period of Buddhist supremacy in India. There were, it is true, Buddhists in India before Asoka, but they were then only a sect, and Buddhism was a religion for two centuries after the fall of the Andras. It was then, however, a struggling faction. The modern Hindu religion was gradually raising its head under the Gupta and Ujjain princes, and in the 8th century it superseded Buddhism in most parts of India.

A great part of the uncertainty that of late years has crept into the chronology of this period is owing to the neglect with which these dynasties have been treated by modern investigators. This has arisen principally from the extreme rarity of their coins, while it has been principally from numismatic researches that progress has been made in the elucidation of many dark passages of Indian history. Coinage was, however, a most distinctly foreign importation into India. The Bactrian Greeks were the coiners *par excellence*, and it is through their coins, and those only, that complete lists of their kings down to 180 B.C. have been compiled. It is only from their coins also that we know the names of the barbarian kings who succeeded them, or those of the Sah kings, who appear next in our

'Journal Bombay Branch of the Royal Asiatic Society,' vol. v. p. 42 and 47.

² As the commencement of this era is not coincident with the years we employ, but about half-way between 78 and 79, either of these figures may be employed in converting years of the Christian Era into those of the Saka or Ballabhi, or Gupta Samvata. Throughout this work I have used the latter figure as that more generally in use.

list. But the four dynasties from Chandragupta to Chandrasri were of native kings, who had only indirectly, if at all, come in contact with the Greeks, and had never learnt the art of coining, or, at least, used it to a sufficient extent to enable us to identify their names or succession from their coins. Their caves, and the inscriptions with which they covered their walls, are fast supplying the information their coins, if they had existed, would have afforded; but the investigation has not been taken up by those who have the ear of the public to the same extent as the numismatists. Enough, however, has been done to show that the materials exist for establishing the history of these dynasties on a sure basis; and when this is done from inscriptions combined with architecture, the results are more satisfactory than when dependent on numismatic evidence alone.

SAH KINGS OF SAURASTRA.

COIN DATES. A.D.			COIN DATES. A.D.		
Nahapana	79	—	Vira Daman		
Ushavadata	—	—	Isvara Datta		
Swami Chastana	—	—	Vijaya Sah	170	249
Jaya Dama	—	—	Damajata Sri	—	—
Jiva Dama	—	—	Rudra Sah	197	276
Rudra Daman	72	151	Visva Sinha		—
Rudra Sinha	102	181	Atri Daman		—
Rudra Sah	104	183	Visva Sah	200	279
Sri Sah	—	—	22. Rudra Sinha	270	—
Sangha Daman	—	—	Asa Daman	271	280
Daman Sah	144	223	Swami Rudra Sah	292	371 ¹
Yasu Daman	—	—	Swami Rudra Sah II.		
Damajata Sri	—	—			

The evidence on which the dates in the above list are founded is in curious contrast with that on which those of the previous dynasties rest. It is almost wholly numismatic. The founder of the dynasty, Nahapana, describes himself as the viceroy or satrap of King Kshaharata,² certainly a foreigner, who conquered the country and held it in subjection for nearly 300 years.

The one point that interests us here is to ascertain from what era the dates on the coins are to be calculated. When I previously wrote on the subject,³ I felt inclined to adopt a suggestion that Nahapana was the founder of the era known afterwards as that of

¹ This list is abstracted principally of the same journal.

from one in vol. viii. p. 27, 'Journal Bombay Branch of the Royal Asiatic Society,' vol. v. p. 49.

² 'Journal of the Royal Asiatic Society,' vol. iv. (N.S.) p. 129.

from a paper by Bhau Daji, vol. ix. p. 243

Vicramaditya, B.C. 56. I did this principally because I felt certain that no king of that name reigned in the first century B.C., and I could discover no event occurring about that time so important as to deserve to be commemorated by an era.

On the other hand, a foreign conquest and the foundation of a new dynasty were just such events as would be so celebrated: and, pending further evidence, this assumption seemed to account for what was otherwise inexplicable in the foundation of this era. Since then, however, a more careful study of Rudra Daman's Bridge inscription,¹ and the architectural evidence detailed in the preceding pages, have convinced me that such a theory was untenable. The Bridge inscription is dated in the year 72, from the same era from which all the coins of these kings are dated. In it he boasts "that, after twice conquering the Sata Karni, Lord of Dakshinapatha, he did not completely destroy him on account of their near connexion, and thus obtained glory." And he boasts of conquering, among other countries, Anupa, Saurashtra, Asva Kutcha, Kukura, Aparanta, &c.²

A little further on in our history, Gautamiputra, in whose reign the era was established which was afterwards adopted by the Guptas and Ballabhis, boasts, in an inscription in a cave at Nassick, that he had conquered, among others, all the countries above enumerated, and as having re-established the glory of the Satavahana dynasty, and destroyed the race of Khagarata.³ All this reveals a state of matters that will not accord with the Vicramaditya era, but does perfectly agree with that of Salivahana.

Assuming that the Sata Karni dynasty is correctly represented in the Puranas, as enumerated above, Rudra Dama would, on the assumption that the dates were Samvat, have been reigning A.D. 16 (72-56), immediately after the establishment of the dynasty, and before the long and prosperous reign of Sata Karni II., which could hardly have taken place had his family been smitten so early in their career. But if we assume that it was A.D. 151 (79+72), it would coincide with the reign of the third king of that name, and at a time when, so far as we can judge from the length of the reigns, and the careless way they are enumerated in the Puranas, the fortunes of the family were considerably depressed; and it is little more than a century and a half after this time that Gautamiputra restored the fortunes of his family. Had 300 years elapsed between these two events, the family could hardly ever have attained the position it did.

Another point of more importance is, that the dates on the Sah

¹ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. viii. p. 119.

² Ibid.

³ Ibid., vol. ix. p. 288; see also Bhandarkar, MS. translation.

coins—from whatever are calculated—extend only to 270–271, or doubtfully to 292.¹ If these are calculated from the Vicramaditya Samvat, they must have ceased to reign in A.D. 214, or at the latest A.D. 236, and there would have been no Khagaratas for Gautamiputra to humble after A.D. 312. On the other hand, if calculated from A.D. 79, their final extinction would have been in A.D. 349, or at latest A.D. 371. So that, though humbled by Gautamiputra, they overlap the Gupta era to some extent, which it seems is almost indispensable to account for the mode in which the Sah coins overlap and run into those of the Gupta series, on which Mr. Thomas so strongly and, it appears to me, so correctly insists.²

One of two things seems necessary: either that the Guptas shall be carried back so as to overlap the Sahs, dating either from the Vicramadityan or Selucidan eras, or that the Sahs be brought down so as to overlap them, if dating from the era bearing their name. Mr. Thomas and General Cunningham prefer the former hypothesis. For the reasons just stated, and others to be given further on, I feel convinced that the latter hypothesis is the only one that is in accordance with the facts of the case as we now know them.

This substitution of the Saka era for the Samvat brings what we know of the history, with what we learn from the inscriptions, and gather from the coins, so completely into accordance, that I can hardly doubt now that it is the correct view of the matter, and certainly more in accordance with the facts than that I previously adopted.

GUPTAS.

Although the Puranas conduct us in so reasonable and satisfactory a manner to the end of the Andrabritya dynasty, their guidance forsakes us there. After that, all the subsequent contemporary dynasties were thrown into hotch-pot—to use a legal expression—and a system of fraud and falsification commenced which is the reproach of Indian history. It is not, however, difficult to see the causes of this new and monstrous invention. For six centuries and a half Buddhism had reigned supreme in India, and the system of the Brahmans, though probably never extinct, was at least subdued and subordinate. With the decline of the Andras this state of affairs was altered. The Guptas, who immediately succeeded them, are shown, both by their coins and inscriptions, to have been followers

¹ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. viii. p. 28.

² 'Essay on the Sah Kings of Saurashtra,' 'Journal of the Royal Asiatic Society,'

vol. xii. p. 16; and 'Journal of the Asiatic Society of Bengal,' vol. xxiv. p.

503; see also Thomas's 'Prin-ep,' vol. ii. p. 95.

of Vishnu and Siva,¹ and their buildings at Erun tell the same story.²

Though the Guptas may have inaugurated the new system, it was by the great Vicramaditya of Ujjain that it was established, A.D. 515-550. He did for the new religion what Asoka had done for Buddhism some seven and a half centuries before his time. He made a state religion in India, and established it so firmly that little more than a century after his death it seems to have superseded Buddhism altogether. It is in his reign, apparently, that the Puranic system was invented—not that the Puranas were written or all the falsifications of history invented in his day, but a commencement was then made, and by the 10th or 11th century of our era it was brought to the complete perfection of fraud in which it is now found.

One of the first necessities of the new system was to throw back the period when India was Buddhist, and to place a gulf between them and their successors. To effect this, the Puranas enumerate the following:—"After these" (the Andrabrityas) "various races will reign—seven Abhiras, ten Gardabhilas, sixteen Sukas, eight Yavanas, fourteen Tusharas, thirteen Mandas, eleven Maunas or Hunas³—seventy-nine princes will be sovereigns of the earth for 1399 years. Then eleven Pauras will be kings for 300 years; when they are destroyed, Kailakila Yavanas will be kings, the chiefs of whom will be Vindhya Sacti, &c.—106 years." After various others: "The nine Nagas will reign in Padmavati, Kantipura, and Mathura; and the Guptas of Magadha along the Ganges to Pnyaga."⁴ Although we cannot identify all these dynasties with certainty, we know, at all events, that, instead of succeeding one another during more than 2000 years, they were all more or less contemporary—certainly that none were earlier than the Gupta era (A.D. 319)—and that none of them survived Vicramaditya (A.D. 550). The Sukas and Maunas, or Hunas, may be those destroyed by him, but of this hereafter. The Vindhya Sactis were contemporary with the Guptas, and the Gardabhilas are somehow connected with Bahram Gaur the Sassanian; and others we recognise dimly, but they are not sufficiently important to be discussed here.

Of all these the most important are the Guptas, and fortunately their date is one of the most clearly established facts in mediæval Indian chronology.⁵

¹ Thomas's edition of 'Prinsep,' vol. i. p. 242, *et seqq.*; see also p. 365, *et seqq.*

² 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 634.

³ The Vishnu Purana has Maunas, the Vayu and Matsya, Hunas. Wilson's

'Vishnu Purana,' vol. iv. p. 209.

⁴ Wilson's 'Vishnu Purana,' vol. iv. pp. 201-218.

⁵ I need hardly say that this is not universally admitted by Indian archæologists. Some indeed of the most eminent

DYNASTY.	COINS AND DATES ON INSCRIPTIONS.	
Sri or Raja Gupta		
Maharaja Ghatotkacha		
M. R. adhiraja Chandra Gupta I.	82, 93+319=	401, 412. Caves 16 to 20 Ajunta. Build- ings at Erun.
„ Samudra „	—	
„ Chandra Gupta II.	—	
„ Kumara „	124+ „ =	443
„ Skanda „	130, 137, 141. 146+ „ =	449, 456, 460, 465
Mahendra a minor	—	—
Maharaja Sri Hastina	163+ „ =	482
Raja Buddha	165+ „ =	484
M. R. adhiraja Toramana	182+ „ =	501

The three last named can hardly be considered as belonging to the great dynasty, though they date from the same era, and the two first were comparatively insignificant characters. It was only Chandra Gupta I., A.D. 401, who assumed the title of Maharaja adhiraja, and founded the greatness of his race on the ruins of that of the Andrabrityas.

In addition to the above chronology, compiled from coins and dated inscriptions, Major Watson has recently supplied a most important item to their history from written records existing in Gujerat.

From this we learn that Chandra Gupta II. reigned twenty-three years after the conquest of Saurashtra by his son; that Kumara Pal Gupta reigned twenty years; and that Skanda Gupta succeeded him, but lost Saurashtra by the rebellion of his Senapati Bhatarka, the founder of the Ballabhi family. Two years after this event Skanda

among them place the Guptas considerably earlier. My conviction, however, is that they never would have done so, had it not been that they place a mistaken confidence on a passage in a foreign author of the 11th century, translated by Remusat to the following effect: "Quant au Goupta Kala (ère des Gouptas), on entend par le mot Goupta des gens qui, dit-on, étaient méchants et puissants, et l'ère qui porte leur nom est l'époque de leur extermination. Apparemment Ballabha suivit immédiatement les Gouptas, car l'ère des Gouptas commence aussi l'an 241 de l'ère de Suca." ('Journal Asiatique,' 4me série, tom. iv. p. 286.)

Albiruni, from whom this passage is taken, lived at the court of Mahmūd of Ghazni, in the 11th century, and was learned beyond his compeers in the learning of the Hindus. He collected

facts and dates with industry, and recorded them faithfully. But he would have been a magician if he could have unravelled the tangled meshes with which the Hindus had purposely obscured their chronology, and could have seen through all the falsifications invented six centuries earlier. We could not do so now without the aid of coins, dated inscriptions, and buildings. None of these were available in his day, and without their aid, the wonder is, not that he blundered in his inductions, but that he went so near the truth as he did. His facts and figures are valuable, and may generally be relied upon. His mode of putting them together and his inductions are, as generally, worthless—not from any fault of his, but because they had been purposely falsified by those who presented them to him.

Gupta died, and, as we are informed, "at this time the Gupta race were dethroned by foreign invaders."¹

The era from which these dates are taken never appeared to me doubtful; and this confirms more and more the conviction that it was from the era that bears their name, A.D. 319. It could not be from the Saka era, as has generally been assumed, from the fact that Albiruni asserts that the era that bears their name, was "apparently" that of their destruction,² because in that case Skanda Gupta must have lived and reigned for ninety-four years in addition to the sixteen we already know, from inscriptions, he occupied the throne. A reign of 110 years seems impossible; and, if it is not so, it seems certain, for the reasons stated in my previous paper, that the Gupta era, 319, is that from which their coins and inscriptions are dated.

Besides this, there is an inscription on the rock at Junaghar, engraved by the same Skanda, the last of the great Guptas. This was not translated by Prinsep, though a copy of it was in his hands before his last illness.³ Had he lived to translate it, my impression is that the controversy as to the age of the Guptas never would have arisen—its evidence seems so absolute. Be this as it may, it never appeared, so far as I know, in a complete form and translated, till this was accomplished by the late Bhau Daji in the sixth volume of the Bombay Journal of 1862. In it we have three dates—the Sudarsana lake is said to have burst its banks in 130, to have been repaired in 137, and a temple to Vishnu built in 138, and twice it is repeated "*counting from the era of the Guptas*" (Guptasya Kala). The stone is worn where the middle date occurs, but there is just space enough for these words. The same king, on the Kuhaon pillar, dates his inscription in 141,⁴ but without mentioning the era, which seems to have been so usual in Bengal as not to require being specified.

Besides this, the 146⁵ years from 319, which we know from their dated inscriptions, that they reigned, is just the interval that is required to fill up the gap between the Ballabhis and their era which they adopted on usurping the inheritance of the Guptas, two years before Skanda Gupta's death.⁶

One other point of considerable importance to Indian history which arises from the fixation of this date (A.D. 465–70) for the destruction of the Guptas is, that it was almost certainly the White Huns who were the "foreign invaders" that struck the blow that stopped their

¹ 'Indian Antiquary,' vol. ii. p. 312.

² 'Journal Asiatique,' series iv. vol. iv. p. 235.

³ 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 634.

⁴ Thomas's 'Prinsep,' i. p. 250.

⁵ This date is from an unpublished

copper-plate grant, in the possession of Gen. Cunningham, and is in addition to the three others of the same reign quoted in my previous paper, p. 112.

⁶ 'Indian Antiquary,' vol. ii. p. 312; see also vol. iii. p. 344.

career. At least, we learn from Cosmas Indicopleustes, writing seventy years after this time, that the Huns were a powerful nation in the north of India in his day, and we may infer, from what he says of them, had been settled there some time.¹

On the Bhitari Lât, Bhau Daji reads—somewhat doubtfully, it must be confessed—the fact that Skanda Gupta had fought, apparently with success, against the Hunas.² But the great point is that it was just about this time that the White Huns broke loose and extended their incursions east and west, so that there is not only no improbability of their being the “foreign invaders” alluded to, but every likelihood they were so. No one, indeed, can, I believe, with the knowledge we now possess, read De Guignes’ chapter on the White Huns,³ without perceiving that it contains the key to the solution of many mysterious passages in Indian history. It is true India is not mentioned there; but from the time of Bahram Gaur in 420, till the defeat of Feroze in 475, the Persians were waging an internecine war with these Huns, and nothing can be more likely than that the varying fortunes of that struggle should force them to seek the alliance of the then powerful Guptas, to assist them against their common foe.

Precisely the same impression is conveyed by what is said by Ferishta and the Persian historians⁴ of the history of that time. Nothing can now, however, be more easily intelligible than the visit of Bahram Gaur to India when first attacked by the White Huns. His marriage with an Indian (? Gupta) princess of Canouge; the tribute or assistance claimed by Feroze and his successors on the Persian throne, are all easily explicable, on the assumption that the two nations were at that time engaged in a struggle against a common enemy. This, too, explains the mention of the Shah in Shahi on Samudra Gupta’s Allahabad inscription.⁵ Hence, too, the decided Persian influence on the gold coinage of the Canouge Guptas,⁶ and the innumerable Sassanian coins of that period found in all parts of the north of India.⁷ In all this the Sassanians seem inseparably mixed with the Guptas. The Persians, however, came eventually victorious out of the war. The great Guptas were struck down at some date between 465–70, or very shortly afterwards. The struggle, however, was apparently continued for some time longer by a subordinate branch of

• ‘Topographia Christiana,’ lib. xi. p. lxxvii. *et seqq.*; Dow’s translation, p. 13. 388, edit. Paris, 1707. ⁵ ‘Journal of the Asiatic Society of

• ‘Journal Bombay Branch of the Royal Asiatic Society,’ vol. x. p. 60. Bengal,’ vol. vi. 1837, p. 963; also Thomas’s ‘Prinsep,’ vol. i. p. 234.

³ ‘Histoire des Huns,’ vol. i. part ii. lib. iv. pp. 325, *et seqq.* ⁶ ‘Ibid., vol. v. plates 36 and 37; also Thomas’s ‘Prinsep,’ vol. i. p. 277, plate 23.

• Malcolm’s ‘Persia,’ vol. i. p. 118 Briggs’s translation of Ferishta, introd. ⁷ Thomas’s ‘Prinsep,’ vol. i. p. 407, *et passim.*

their successors; inasmuch as we learn from an inscription found at Apsar in Behar,¹ that the fourth of that dynasty, Damodara Gupta, "successfully encountered, at the battle of Maushari, the fierce army of the Western Huns." This event may have stopped the career of the Huns in India, in which case it could not well have taken place before the year 535, when Cosmas Indicopleustes is supposed to have written his 'Topographia Christiana;' but it is by no means clear that he was not describing events that took place when he was himself in India some time previously. But be this as it may, it brings us to the time when the battles of Korûr—of which more hereafter—and Maushari freed India from the Sakas and Hunas, who had long held her in hated subjection. As I shall presently attempt to show, it appears to me hardly doubtful that these two battles were fought between 524 and 544; and they thus fix one of the most important epochs in mediæval Indian history. Indeed, so near each other are these two events in date, that I sometimes feel almost inclined to fancy they may be only different names for the same battle. At all events, they almost certainly represent parts of the same campaign which freed India in that age from the Yavanas; and that it was to commemorate the glories of these struggles that the Vicramaditya Samvat was instituted. This expulsion of the Yavanas was, too, the first serious blow that was struck at Buddhist supremacy, and from the effects of which it never afterwards completely recovered.

BALLABHI DYNASTY.

	DATES ON INSCRIPTIONS.	A.D.
Bhatarkn Senapati	—	465 or 470
Dharasena "	—	—
Dronasinha	—	—
Dhruvasena Maharaja	—	Cotem. Vicramaditya Dynasty of Ujjain, 470 to 550.
Dharapatta	—	
Grihasena	—	
Sridhara Sena	—	
Siladitya I.	—	
Charagriha I.	—	
Sridhara Sena II.	272	591
Dhruvasena II.	—	Cotem. Hiouen T'sang
Sridharasena III.	—	
Siladitya II.	356	
Charagriha II.	—	
Siladitya III.	—	
Siladitya Musalli	400	718

¹ 'Journal of the Asiatic Society of Bengal,' 1866, p. 273. See also Cunningham's 'Archæological Reports,' vol. iii. p. 136.

However mistaken Albiruni may be in his dates, there is little doubt that he is quite correct in his statement to the effect that "L'ère de Ballabha est postérieure à celle de Saca de 241 ans. Apparemment Ballabha suivit immédiatement les Gouptas, car l'ère des Gouptas commence aussi 241 de l'ère de Saca."¹ This we learn also, with the particulars how it happened, from Colonel Watson's account of the transaction; while Colonel Tod's celebrated Puttun Somnath inscription makes it also certain that the Ballabhi era commenced A.D. 319.² This being so, it seems difficult to understand why the era should have been called that of Ballabhi as well as that of the Guptas, unless it were that it was adopted by the first-named dynasty, and that they dated from it their acts and inscriptions, which are extremely numerous. There may be reasons why this should be otherwise; but, though the point has been generally and fiercely contested by eminent Indian chronologists, I fail to appreciate the arguments brought forward in favour of either the Vicramaditya or Saka eras,³ and look upon their own era (A.D. 319) as certainly the one from which all the Gupta inscriptions are dated.

My impression is, that this would never have been considered doubtful but for an incautious statement by Colonel Tod that Ballabhi was destroyed by the Parthians A.D. 524,⁴ in the reign of a Siladitya, its last king. Its inhabitants were, according to this account, slaughtered with the usual romantic incidents; but after a while a remnant established themselves in Sidhapore, and finally built a new capital, which they called Anhilwarra.

The utter falsity of the information so supplied to Colonel Tod is proved by the fact that when Ballabhi was visited by Hiouen Thsang, 115 years after its reputed destruction, he found it not only standing, and neither Sidhapore nor Anhilwarra thought of, but the old capital still remaining one of the richest and most prosperous cities of India, and its king one of the three greatest kings of northern India. The king's name was Dhruvapatou, and he was a nephew or grand-nephew of Siladitya of Malwa, and the son-in-law of Siladitya, the reigning king of Canouge.⁵ Lastly, we have the dates in copper-plates of a Dhruvasena, one in $310 + 319 = 629$; the other $322 +$

¹ 'Journal Asiatique,' 4me série, tom. iv. p. 286.

² Tod's 'Annals of Rajputana,' vol. i. p. 801.

³ Lassen's 'Ind. Alt.,' vol. ii. p. 752, *et seqq.* to 987; Dowson 'Journal of the Royal Asiatic Society' (N.S.), vol. i. p. 247, *et seqq.*; Thomas's 'Prinsep,' vol. i. p. 270-276; Cunningham's 'Archæological Reports' vol. iii. p. 56; Babu Rajendra Mitra, 'Journal of the Asiatic Society

of Bengal,' vol. xliii. p. 372, &c., &c.

⁴ 'Annals,' vol. i. p. 216, *et seqq.* At p. 230 he quotes another account, which places the destruction of the Ballabhi era at 805, instead of 205, as in the previous statement. These are evidently clerical errors. If he had found another 405, it would probably have been correct within a year or so— $405 + 319 = 724$.

⁵ 'Vie et Voyages,' pp. 206, 254, 260; 'Relations,' &c., vol. ii. p. 163.

319, or 641,¹ the very year that Hiouen Thsang met him at Allahabad, if we assume them dated from the Ballabhi Samvat.

It would be satisfactory if we could determine the date of the destruction of Ballabhi with precision, as it is one of these events that mark an epoch in Indian history. It was one of the concluding acts of the old drama that closed the mediæval period of Indian history, and ushered in the dark ages which lasted more than two centuries from that time.

The materials for this hardly exist at present, though it may be approximated. We have numerous inscriptions of this dynasty, dated 310, 326, 338, 348, &c.,² or A.D. 629, 645, 657, 667 respectively, if the figures are all correctly read, which is not quite clear; and lastly, Mr. Burgess reports one dated 400, or A.D. 719, belonging to the last Siladitya, and consequently approaching very nearly to the event. Two accounts are current as to the mode in which the destruction was effected: one, that it was caused by an earthquake, which may have happened at any time;³ the other (by Tod), that the city was destroyed by the Parthians. If it was by a foreign foe, it could only have been by the Mahomedans. They were on the Indus in strength in 22 Hegira,⁴ or A.D. 644, or before Hiouen Thsang had left India, and no foreigner could have crossed the Indus or attacked Ballabhi after that time, or for some years before it, without being noticed by Mahomedan historians. They remained there in strength till after Mahomed Kasim, 711-715,⁵ and it was to him that I was at one time inclined to ascribe the destruction. If, however, Mr. Burgess's date is correct, his death was three years too early. But I do not think it at all improbable that Ballabhi is one of the cities—Barus and Uzain—said to be plundered by Junaid in A.D. 725 or 726.⁶ Barus looks very like Baroach, and Uzain is almost certainly Ujjain—but whether Maliba is Ballabhi, I must leave others to determine.

All the accounts agree that Anhilwarra Puttun was founded Samvat 802, or A.D. 746,⁷ which may be correct within a year or two; but from the accounts we have, it is clear that an interval of from twenty to thirty years must have elapsed between the two events, during which the inhabitants of the destroyed city sought refuge at PUNCHASUR and SIDHAPORE before they undertook the building of their new capital. If, therefore, we assume 725 as the date of the destruction of Ballabhi, we shall probably not err more than a year or two either way.

The earliest date of this family yet discovered is one on a copper-

¹ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. viii. p. 245.

² *Ib.d.*, vol. viii. p. 245.

³ Forbes' 'Ras Mala,' vol. i. p. 18; Tod, 'Annals,' vol. i. p. 280.

⁴ Elliot, 'Historians of India,' vol. i. p. 417.

⁵ *Loc. cit.*, 432, *et seqq.*

⁶ *Loc. cit.*, 441-42.

⁷ 'Ras Mala,' vol. i. p. 24; Tod's 'Travels,' p. 149.

plate of Dharasena II., which has been read by Professor Bhandarkar as 272,¹ or, according to the views here adopted, 591. It is hardly probable that any much earlier will be found; for it must be borne in mind that though the Ballabhis wrested the sovereignty of Gujerat from the Guptas two years before Skanda's death (*ante*, p. 724), neither the first nor second of the race ventured to assume even the modest title of Raja; they were content to remain Senâpatis, or Generals. The third calls himself Maharaja; but their greatness only culminated in or about A.D. 650, when one of them, Sri Dharasena III., became Maharaja Adhiraja—King of kings or Emperor of Northern India.² The reason of this, as we shall presently see, was that the family that really succeeded the Guptas in the place of supreme authority in India was that of Ujjain, the second or third monarch of this race being the celebrated Vicramaditya, whose date, for reasons to be given hereafter, seems almost certainly to have been from 515 to 550. Be this as it may, as we shall presently see, it seems quite certain that a great Brahmanical revival took place in the beginning of the 6th century, which quite overshadowed all the Buddhist dynasties in northern India. For a while these were again eclipsed by a reflex wave of Buddhism, which for a century—A.D. 550–650—again illumined India. It was a last expiring effort, however, and after the last-named date it was only a struggle for existence on the part of the Buddhists, and in another century they are known no longer in those central countries where they had so long reigned supreme.

¹ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. x. p. 70.

² 'Journal of the Asiatic Society of Bengal,' vol. vii. p. 972.

CHALUKYA DYNASTIES.

WESTERN BRANCH.
CAPITAL KALYAN.

1. Jaya Sinha Vijayaditya.
2. Raja Sinha, Rana Raga, Vishnu Vardhana.
3. Vijayaditya II.
4. Pulakesi, A.D. 489?
5. Kirtti Varma I.
6. Mangalisa.
7. Satyasraya began to reign 609.
8. Amara.
9. Aditya.
10. Vikramaditya I.
11. Vinayaditya, Yuddha Malla, began to reign A.D. 680.
12. Vijayaditya III. began to reign A.D. 695.
13. Vikramaditya II. began to reign A.D. 733.
14. Kirtti Varma II.
15. Kirtti Varma III., cousin of the last, A.D. 799.
16. Tailapa.
17. Bhima Raja
18. Ayya, or Kirtti Varma IV.
19. Vijayaditya IV.
20. Taila Bhupa II. or Vikramaditya III., in A.D. 978 restored the monarchy which had been for some time usurped by the Batta Kula. He died A.D. 997.
21. Satyasraya II. Irivi Bhujanga Deva, A.D. 997.
22. Vikramaditya V. began to reign about A.D. 1008 (?)
23. Jaya Sinha Deva, Jagadeka Malla, about A.D. 1018 (?)
24. Someswara Deva I., Trailokya Malla Ahawa Malla, about A.D. 1040.
25. Someswara Deva II., Bhuneka Malla A.D. 1099, expelled by his brother.
26. Vikramaditya VI., Kali Vikrama, Tribhuvana Malla, in A.D. 1076.
27. Someswara Deva III., Bhuloka Malla, A.D. 1127.
28. Jagadeka Malla, A.D. 1138.
29. Tailapa Deva III., Trailokya Malla, A.D. 1150.
30. Someswara Deva IV., Tribhuvana Malla, A.D. 1182. Dethroned by Bijjala Deva of the Kalabhuriya line.

After this the southern part of these dominions fell under the sway of the Hoisala Badalas, whose rise in the Mysore dates from A.D. 984; their destruction by the Mahomedans in 1310.

EASTERN BRANCH.
CAPITAL RAJMEHENDRI.

1. Vishnu Vardhana II., or Kubja Vishnu Vardhana, conquered Vengi A.D. 605.
2. Jaya Sinha I.
3. Indra Raja, his brother.
4. Vishnu Vardhana III.
5. Manga Yuva Raja.
6. Jaya Sinha III.
7. Kokkili.
8. Vishnu Vardhana IV. } brothers.
9. Vijayaditya I.
10. Vishnu Vardhana V.
11. Narendra Mriga Raja.
12. Vishnu Vardhana VI., or Kali Vishnu Vardhana.
13. Vijayaditya II., or Guna Gunanka Vijayaditya, conquered Kalinga.
14. Chalukya Bhima I., his brother
15. Vijayaditya III., or Kollabhoganda Vijaya.
16. Amma Raja.
17. Vijayaditya IV., or Kandagachita Vijaya.
18. Talapa. Usurper.
19. Vikramaditya V., the son of a brother of Amma Raja I.
20. Yuddha Malla.
21. Raja Bhima II.
22. Amma Raja II
23. Dhanarava. Interregnum of twenty-seven years.
24. Kirtti Varma, son of Dhanarava.
25. Vimaladitya, his brother.
26. Raja Raja Narendra.
27. Rajendra Chola.
28. Vikrama Deva Kulottunga Chola.
29. Raja Raja Chola, viceroys for one year.
30. Vira Deva Kulottunga Chola, or Suptama Vishnu Vardhana. Viceroys from A.D. 1079 to 1135.

After Vira Deva Kulottunga Chola the country fell under the sway of the Kakatiya dynasty of Worangul, of whom Pratapa Rudra was the chief (A.D. 1182). The latest of their inscriptions is dated A.D. 1336.

The two lists in the preceding page are among the most interesting and most important of those we possess, inasmuch as they contain the backbone of all we know regarding the Chalukyas, and are, in fact, what justify us, historically, in erecting their style into a separate division, different from the other forms of architecture known in India.

What we know of these dynasties is almost wholly due to the intelligent zeal of Sir Walter Elliot, who, during his residence in India, made a collection of 595 inscriptions from various parts of the Dekhan. From these he abstracted the lists he first published in the fourth volume of the Royal Asiatic Society; but afterwards much more in detail in the 'Madras Journal,' in 1858, from which these lists are copied verbatim.¹ Some of the inscriptions were translated and published with those papers, and others by Major—now General—Le Grand Jacob, in the Bombay Journal (vol. iii. p. 206, *et seqq.*), and other notices of them are found among Mr. Wathen's inscriptions in various volumes of the 'Journal of the Royal Asiatic Society.' But we shall not know more than a fraction of what we ought to, and might know, till Sir Walter Elliot's inscriptions are translated and published.² When this is done, and the architecture of the Nizam's territory explored, the Chalukyan style will take its place worthily between the Dravidian and Indo-Aryan styles, and will, if I mistake not, be found equal to either, both in importance and in artistic merit.

Fortunately there is no mistake or doubt about the era from which the Chalukyan inscriptions are dated: the Ballabhi branch succeeding to the possessions of the Guptas in Gujerat, naturally adopted their

¹ These lists were republished by Professor Dowson in the new series of the 'Journal of the Royal Asiatic Society,' vol. i. p. 253, *et seqq.*, but with chronological additions that are by no means improvements.

² The advantage of their publication was so strongly felt by the Council of the Royal Asiatic Society that in 1878 they, backed by a letter from Sir Walter, appealed to Her Majesty's Secretary of State for India in Council, to sanction an expenditure not exceeding £200 for the purpose. It seems, however, that the finances of India could not bear the strain, for in August last a reply was received to the effect that "His Lordship regrets that he cannot consent to charge the public revenues of India with the cost of such an undertaking." As the

Indian Council are responsible, and know best what should be done and what refused, there is no more to be said about the matter, though to outsiders this seems slightly inconsistent with their grant of £2000 to Max Müller for doing nothing that he had not been well paid for doing beforehand. As no other means are available in this country, it is to be hoped that either the French or German Governments will take it up. They have always abundance of funds for such purposes; and had these inscriptions been collected by one of their countrymen, they would have been published without a year's delay after having been brought home, although they have no interest in India that can for one moment be compared with ours.

era, but the southern branch being entirely detached from any such association, adopted the Saka era (A.D. 79), which was then, so far as is known, the only other era at that time in use in India. What is equally important is, that there seems only one doubtful date among all those quoted in the lists—that of 411 Saka (A.D. 490), attached to the name of Pulakesi I. In his first paper,¹ Sir Walter Elliot thought it so improbable, that he rejected it altogether; and Professor Eggeling tells me he has strong reasons for suspecting the copperplate on which it is found to be a forgery.

As an initial date it does not appear impossible, if my views are correct, though certainly improbable. If Bhatarka Senapati wrested Gujerat from Skanda Gupta two years before his death, or in 463 or 468, it is by no means impossible that the fourth from him may have been reigning in A.D. 490, but the difficulty is the other way. There seems no doubt, from Mr. Burgess's Badami inscriptions,² that Mangalisa succeeded his brother Kirtti Varma in 567, and it does seem impossible that he should have been the son of one who was reigning in 490, especially if he continued to reign till 609. If Mangalisa was the son of Pulakesi, which there seems no reason for doubting, it is evident that the central figure of his date must be altered to a higher number; but to what extent we shall not know till it is ascertained whether Vijaya was the son or grandson of Bhatarka Senapati. In the meanwhile, however, if we, as an hypothesis, add fifty years to the date of 411, and make it 461, or A.D. 540, it will allow Pulakesi a reign of twenty-seven years before the accession of Mangalisa in 567 which will bring the whole within the limits of probability, and seems perfectly consistent with the context.

With the seventh king we tread on surer ground. He was the king who, when bearing his grandfather's name, Pulakesi, Hiouen Thsang visited in 640,³ and was, as his inscriptions tell us,⁴ the hero of those wars with Harsha Verddhana, or Siladitya of Malwa, which Ma-twan-lin so graphically describes as occurring in 618 to 627. From that time the dynasty seems to have flourished till the death of Vicramaditya II. He ascended the throne 733, and died about 750, or twenty-five years more or less after the destruction of the Ballabhi branch. After this, as Sir Walter Elliot expresses it, "the power of the Chalukyas was alienated for a time, or had suffered a partial obscuration, till the time of Teila, who is described as restoring the monarchy in 973."⁵ After this it enjoyed two

¹ 'Journal of the Royal Asiatic Society,' vol. iv. p. 12.

² 'Report on Belgam and Kuladgi,' p. 24.

³ 'Mémoires des Contrées,' &c., vol. ii. p. 150.

⁴ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. iii. p. 206, *et seq.*

⁵ 'Journal of the Asiatic Society of Bengal,' vol. vi. p. 68.

centuries of prosperity, till it was finally extinguished—their northern possessions passing to the Kalabhuryas—their southern to the Hoisala Bellalas of Dwarasamudra or Hullabid.

The history of the younger branch of this family will be more interesting to some future historian of Indian architecture than it is to us at the present day. Their possessions lay principally below the Eastern Ghâts, on the shores of the Bay of Bengal, in what are generally known as the three Circars, extending from Gangam—in their day I believe—to Mahavellipuram; but of their architecture we know nothing. No traveller educated in architectural matters has yet visited that country; and though it sounds like a paradox to say so, what we do know of it we learn from buildings not erected by them, and in a country they never seem to have possessed. It is only from the buildings of Pratapa Rudra at Worangul and elsewhere above the Ghâts that we can appreciate the perfection to which they had brought their style.

From the meagre extracts from the inscriptions of Pulakesi I., which Sir Walter Elliot gives in his first essay on this subject,¹ there seems little doubt that he was the king who, 100 years before Hiouen Tshang's time, harried the monastery at Amravati,² and abolished Buddhism in those parts. It seems also more than probable, as he conquered the Chola, and burnt Conjeveram, that he also expelled the Pallavas, and commenced the works at Mahavellipur. If the rock-cut monastery mentioned by Fa Hian and Hiouen Tshang, and so often referred to above, existed at all, it was in his territories, and may still exist in the Nizam's. If it did so, nothing seems more probable than that he should seek to mark the boundary of his southern conquest by similar works. Knowing all this, we see also why there should be so much similarity between Mangalisa's cave at Badami, and the nearly contemporary caves at Mahavellipur. We know, too, that there is a vast tract of country in Central India, extending east and west from shore to shore, and north and south from Sadras to Ellora, which is covered with buildings of great beauty and interest, but which nobody cares to explore. We know also that there exists in the Asiatic Society's rooms a volume which contains their history, and that of the dynasties who built them, but which nobody cares to read. Knowing how easily all this could be remedied, it is tantalising to close this history with so meagre a sketch of the Chalukyan style as that contained in the preceding pages, but as the principles of the Indian Council seem fixed, its description must in all probability be relegated to a subsequent generation.

¹ 'Journal of the Royal Asiatic Society,' vol. iv. p. 9.

² 'Vie et Voyages,' p. 188.

UJJAIN AND CANOUGE DYNASTIES.

	REIGN.	DATE.
Vasu Deva	15	470 ?
Vicramaditya I. of Ujjain	20	495 ?
Sri Harsha	35	15
Vicramaditya II. the Great	30	550
Siladitya I. of Malwa	25	580
Prabhukara	5	605
Raja Verddhana	40	610
Siladitya II. of Canouge	—	648-650
Died and troubles commenced	—	

Although the Ballabhis wrested the province of Gujerat from the failing hands of Skanda, the last of the Great Guptas, two years before his death, in or about 470, they remained long in a subordinate position. Their earliest inscription yet found dates only in 593, and their one Emperor or Raja Adhiraja, Sri Dharasena III., only ascended the throne after the Canouge dynasty were struck down in 648-50.

The interval between these two events we are now happily able to fill up with two of the most illustrious dynasties of India—the first including the reign of the great Vicramaditya of Ujjain, who is to the Hindus what Solomon is to the Jews, or Asoka to the Buddhists. The last-named religion, as mentioned above, was becoming effete about the middle of the 5th century, and the Guptas were introducing the modern Brahmanical faith in its place. What, however, they were only feebly attempting, the Ujjain dynasty accomplished with a brilliancy that has eclipsed everything that happened before or since in India, in the eyes of the Hindus at least. All that is great in science, or in poetry, or the arts, shone forth around his wonderful throne—the exact counterpart of Solomon's—and all that subsequently took place in India bears the stamp of his greatness. It seems, however, to have been too bright to last. The four succeeding monarchs were Buddhists—of a singularly tolerant type it is true—but still certainly favourers of that religion. The last of them, Siladitya, was the king at whose court Hiouen Thsang sojourned in 636, and afterwards in 642, and where he witnessed the festival of the distribution of alms so often alluded to above. Hiouen Thsang gives the date of his death categorically, 650, and adds, though in the form of a prophecy, that after that, “l'Inde entière sera en proie à des troubles affreux—et des hommes pervers se feront une guerre acharnée.”¹ This is more than confirmed by Ma-twan-lin, but with an apparent discrepancy of date, to the extent, it may be, of two years.² It was in fact the commence-

¹ ‘Vie et Voyages,’ p. 215.

² ‘Journal of the Asiatic Society of Bengal,’ vol. vi. p.

ment of those troubles which extinguished Buddhism, then in Central India, and a century later abolished it wholly, except in some remote corners of the land.

Whether he died in 648 or 650, there is no doubt, from the numerous incidents our Chinese traveller recounts, that this Siladitya ascended the throne 610, one year after his great rival, Pulakesi II., of Kalyan, who, as pointed out above, began to reign in 609, and fought with him with varying success in 618-627.

For the chronology of the four preceding reigns we have nothing but the assertion of Hiouen Tshang, that "suivant la tradition"¹—and in another place, "on lit dans l'histoire de ce royaume,² que le trône était occupé il y a soixante ans par un roi nommé Siladitya;" and further, that he reigned fifty years, which would carry us back to 530 for the accession of this king, supposing the passage was written in 640.

Notwithstanding the confidence with which it is stated, I have no hesitation in rejecting as excessive 110 for the length of the reign of three kings, two of whom were brothers. I do so with the more confidence, as our author, though so exact a geographer, and recorder of things he saw, is in no one instance to be depended upon for his dates. He resided, for instance, for five years at Nalanda, and must have had access to its records, yet he tells us that the convent existed for 700 years,³ and then gives the names of the five kings by whom the various parts were built from that time to his day, but sees no absurdity in representing these in all instances as the son of the one next named previously. Each, according to his account, must have reigned more than 100 years! To what extent this date of the accession of Siladitya must be curtailed can only be ascertained from subsequent discoveries or investigations. For the present it will suffice to abridge it by twenty years, which will bring it in accord with all that we at present know from other sources.⁴

When we turn to the other end of our list, we have certainly three—probably four kings—for whom we must find room in eighty years and one of the three, the great Vicramaditya, must have had a long reign. Professor Wilson ascribes to him thirty-five years,⁵ and I know of no authority better than his, especially for the history or chronology of this period. The Hindus themselves, with their usual

¹ 'Vic et Voyages,' p. 204.

² 'Relations,' &c., vol. ii. p. 156.

³ Loc. cit., vol. ii. p. 42.

⁴ When I wrote last on the subject ('Journal of the Royal Asiatic Society,' vol. iv. N.S.) I assumed the figures as they stand, as it did not then appear to me of much importance, and as this is

the only arbitrary adjustment I have had occasion to make in the chronology, I have let this stand in the text, leaving the correction to be made when authority is found for it. The twenty years, more or less, do not affect any architectural question mooted in the preceding pages.

⁵ 'Asiatic Researches,' vol. xv. p. 87.

carelessness, have forgotten to record it; and though there are certain dates in the Puranas and elsewhere, there are no means of testing their accuracy; for his accession, however, there are one or two that are worth recording. Thus, Wilford reports that this Vicramaditya ascended the throne of Malwa 441,¹ reckoning from the first of Salivahana, or, 520; or, according to the Agni Purana, 437 years after the same epoch, or 516,² which, I believe, may be the exact year; and there are several other dates which might be used to confirm this assumption, but there are no means of testing the genuineness.

Assuming this for the present, it leaves only forty-five years for the two or three preceding reigns; and it seems hardly sufficient for the purpose, for, as we shall presently see from the 'Raja Tarangini,' there were nine descents between Pratapaditya, the friend of the first Vicramaditya, and Matrigupta, the protégé of the second. Of course there may be considerable overlapping among the first and last of these nine kings, but it seems impossible to compress the whole within a shorter period than has been allowed.

However the small discrepancies of this dynasty may hereafter be adjusted, it is satisfactory to know that there is probably no date that will admit of a greater correction than say ten years, if so much, and the age of the last king, Hiouen Thsang's friend, enables us to feel perfectly certain as to the dates of his son-in-law, Dhruvasena, of Ballabhi, of Sasanka, of Pundra Verddhana, of Kumara, of Kamarupa, and of Pulakesi II. of Kalyan. We have thus at least one fixed point in our mediæval history which is quite certain, and from which we can calculate backwards and forwards without difficulty, and is also an interesting one, as its final date, 650, is the beginning of the end which was consummated, as we shall see in the next section, by Laladitya just one century later.

KASHMIR.

Asoka, 276 to 240 B.C.

Jaloka.

Damodara.

Hushka

Jushka

Kanishka

} Tartar Princes established
} Buddhism.

Abhimanu, 79 A.D. ?

GONARDYA DYNASTY.

Gonarda. *Naga worship restored.*

Vibhishana.

Indrajita.

Ravana.

Vibhishana.

Nara.

Siddha.

Utpalaksha.

Hiranyaksha.

Hiranyakula.

Vasukulo.

Mihirakula, invaded Ceylon 250 ?

Vaka.

¹ 'Asiatic Researches,' vol ix. p. 150.² Loc. cit. p. 161.

APPENDIX.

KASHMIR—*continued.*

Kshitinanda.	Hiranya	} Contemporaries of Vicramaditya.
Vasunanda.	Toramana	
Nara.	Matrigupta,	viceroy under Vicramaditya
Aksha.	IL, 545.	
Gopaditya, 330?	Pravarasena II,	invaded Siladitya of
Gokarna.	Gujerat,	560.
Narendraditya.	Yudhishthira II.	
Yudhishthira.	Nandravat.	
	Ranaditya.	
	Vikramaditya.	
	Baladitya.	

ADITYA DYNASTY.

Pratapaditya, kinsman of Vicramaditya
I., 390.
Jalaukas.
Tunjina.
Vijaya.
Jayendra.
Arya Raja.

GONARDYA LINE *restored.*

Meghavahana invaded Ceylon, 472.
Pravarasena I.

NAGA OR KARKOTA DYNASTY.

Durlabhaverddhana, 627.
Pratapaditya, 663.
Chandrapira, 713.
Parapira, 721.
Laladitya, 725; died 761. Conquered
Yasoverna of Kanouje, and overran
India.

When the 'Raja Tarangini' is spoken of, in a real Indian history, it is only in the sense of the French proverb—"Parmi les aveugles les borgnes sont rois." It may be the best, but it is a very indifferent specimen of its class. Some of the few events it narrates are interesting and important, but they lose much of their value from the chronology to which they are attached being wilfully and systematically falsified. Even they, however, may become more valuable than they now appear, when the work is better edited than it has been hitherto. The earliest and best account we have of it is that of Professor Wilson, in the fifteenth volume of the 'Asiatic Researches.' The translation, afterwards published by Troyer in French, is fuller, no doubt, but is made from a less perfect manuscript, and is far less critical. Dr. Geo. Bühler, who is now in the valley, is said to have collected several additional and more complete MSS., from which it is understood he is preparing a new edition of the work. When this is done, we may be able to use it more profitably; meanwhile, for chronological purposes, we can only try and find an initial and final date, and with one or two intermediate synchronisms, try to bring the whole into an intelligible sequence; but so hopelessly is the chronology confused by its author, that this at present can only be effected by the application of a system of averages, which is, and always must be, a most unsatisfactory mode of procedure.

Rejecting at once as worthless or hopelessly lost all those parts of the history before the third century B.C., the first name we come to is the familiar one of Asoka, but here placed 1394 B.C., or more than 1000

years too early. It was in order to recover what was lost by this first error that Kalhana Pandit was forced to falsify all the dates up to the accession of the Karkota dynasty (A.D. 627), when they were known, even in his day, as certain within ten or twenty years. To effect this, he added ten, twenty, or thirty years here and there, as caprice dictated, till at last; losing patience, he gave one king, Ranaditya, in the 6th century, 300 years, instead of a possible thirty, and so made both ends meet! So history is written in the East!

After Asoka's, the next name we meet in the lists with which we are familiar is that of Kanishka, and he plays so important a part in the history of Kashmir and Gandhara, that it would be of extreme interest if his date could be fixed with even approximate certainty. The 'Raja Tarangini' gives us no help in this matter. Generally, it has been assumed, principally on numismatic evidence, that he reigned either immediately before or immediately after the Christian Era;¹ but between him and Asoka our lists afford only two names. If, therefore, we are to apply to this history the same logic the very learned have attempted to apply to dates of the Nirvana in the 'Mahawanso,' we must either bring down Asoka to the first century B.C., or take back Kanishka to the third. As neither process is admissible, nothing remains to be done but to admit that the record is imperfect, and that it is only from external evidence that these dates can be fixed with anything like certainty.

Even admitting that Hushka and Jushka were the father and grandfather of Kanishka, which I am inclined to think may be the case, instead of his brothers, as is usually supposed, it will hardly help us much—four reigns of insignificant princes in 200 years is nearly equally inadmissible, and will not help us to fix Kanishka's date from Asoka's.

Recently the question has been very much narrowed by the discovery of a number of dated inscriptions at Muttra and elsewhere, in which the name of Kanishka and his successor Huvishka frequently occur—the latter always following, never preceding, the former name. It is this that makes me believe that the Hushka of the chronicle was the father of Kanishka, and nothing in that case is so probable as that his successor should take his grandfather's name. It is almost impossible he should take his uncle's, and as the name of Jushka appears nowhere in the inscriptions, it is natural to assume that he had passed away some time before they were written.

Be this as it may, the following table gives the inscriptions as they were found by General Cunningham:²—

¹ General Cunningham hesitates between 17 and 24 A.D. for his death. *Alt.*, vol. ii. p. xxiv).

² *Archæological Reports*, vol. iii. p. 29, *et seqq.* Ed. Thomas's Introduction to Marsden, p. 46, *et seqq.*

APPENDIX.

In the Indo-Pali Alphabet.

	KANISHKA.	Maharaja Kanishka. Samvat 9.
	HUVISHKA.	Maharaja Devaputra Huvishka. Samvat 39. Maharaja Rajatiraja Devaputra Huvishka. Samvat 47. Maharaja Huvishka. Samvat 48.
Math	VASUDEVA.	Maharaja Rajatiraja Devaputra Vasu (deva). Samvat 44. Maharaja Vasudeva. Samvat 83. Maharaja Rajatiraja, Shahi, Vasudeva. Samvat 87. Raja Vasudeva. Samvat 98.

In the Bactrian-Pali Alphabet.

	Bahawalpur.	Maharaja Rajadiraja Devaputra Kanishka. Samvat 11, on the 28th of the (Greek) month of Dæsius.
Loco	Manikyala Tope.	Maharaja Kneshka, Gushana vasa samvardhaka. "Inceaser of the dominion of the Gushans" (Kushans). Samvat 18.
	Wardak Vase.	Maharaja rajatiraja Huvishka. Samvat 51, 15th of Artemisius.

In addition to these Bactrian-Pali inscriptions, we have a record of a king called Moga (Moa?), on a copper plate from Taxila, wherein the Satrap Liako Ku-uluko (Kozola?) speaks of the 78th year of the "great king, the great Moga," on the 5th of the month of Panæmus.

In addition to the inscriptions bearing these names, General Cunningham quotes a great number of others, with dates in the same Samvat era, extending from the year 5 to the year 281, but without any kings' names in them. Their purport, however, and the form of the characters used, he considers sufficient to show that they form a connected series dating from one and the same era, whatever that may be.

Here, therefore, we have an era, which we may safely assume was established by Kanishka, either from the beginning of his reign, or to mark some important event in it, and which was used after his time for two or three centuries at least. The question is, was that the era since known as that of Vicramaditya, dating from 56 B.C., or was it the Saka era of King Salivahana, dating 185 years after that? General Cunningham unhesitatingly adopts the former; and though it is not a subject to dogmatise upon, I am much more inclined to adopt the latter.

In the first place, because I can find no trace of any such era being in use before the cataclysm in A.D. 750. Bhau Daji states that he knows no inscription dated in it before the 11th century.¹ General Cunningham says it was not used as early as 826,² but, in another place, quotes an inscription in 754.³ I know of none earlier; and can trace no allusion to any king of the name of Vicramaditya in the first century B.C., and no events that could have given rise to an era

¹ 'Journal Bombay Branch of the Royal Asiatic Society,' vol. ix. p. 242. ² 'Archæological Reports,' vol. ii. p. 266. ³ Loc. cit. p. 68.

n 56 B.C. No trace of it is found in Thibet, in Burmah, or Cambodia, and it never was heard of in Ceylon or Java. In all these countries the Saka era is known and was used, and it seems strange that an era established by so powerful a Buddhist king as Kanishka should have endured for two or three centuries, and then perished, without leaving a trace in any Buddhist country, and then, after the 8th century, been revived and adopted by the Brahmans for their chronology. It may be so; but it is so strange, it seems to require some strong evidence to make it credible, and none such has yet been advanced.

Hitherto Kanishka's date has been assumed almost wholly on numismatic evidence, but it seems to me without sufficient grounds. In all the lists hitherto published,¹ there are at least a dozen barbarian kings, several of whom, from the extent of their mintages, must have had long and prosperous reigns. To compress the whole into the sixty-four years that elapsed for the destruction of the Bactrian kingdom (120 B.C.), and the era of Vicramaditya (56 B.C.), seems to me a very strong measure, for which I can see no justification. To allow each, on an average, sixteen years' reign, seems very much more probable, especially as many more names may yet be discovered—and even without them this would take us on to the Saka era (A.D. 79) without difficulty. One of them, Gondophares, as we shall presently see, reigned for twenty-six years at least.

The Roman consular coins found by M. Court, above referred to (*ante*, p. 79), were so worn as to be hardly legible, and though, therefore, they limit the antiquity of his reign certainly to this side of 44 B.C., they by no means prove that he was so early. (On the contrary, the coins being worn, seems to prove that they were old before being buried; the probability is that they may have belonged to some pilgrim, or missionary, in the West, and had become sacred relics before they were enshrined. If Kanishka had merely wanted foreign coins, Greek or Roman, he might have had hundreds of perfect ones at his command. There must have been some other and holier motive for their deposit than merely to mark a date.

Every one has heard of the legend of St. Thomas the Apostle visiting the court of Gondophares, and, some add, being beheaded by his order. It may be a legend, and not one word of truth in it, but those who invented it in the second or third century must at least have had the means of knowing what was the name of the king who was on the throne of Gandhara at, or immediately after, the time of the Crucifixion. This name appears frequently on coins and inscriptions, and, from the numismatic evidence, has been placed by all as anterior

¹ They are all given in Thomas's edition of 'Prinsop,' vol. ii. p. 173, *et seqq.*, to which the reader is referred.

to Kanishka, and I fancy that no one looking at the coins can well arrive at any other conclusion. If this is so, and he was reigning at any time between A.D. 33 and 50, Kanishka certainly belongs to the latter half of that century.

Against this it must be stated that both General Cunningham and Professor Dowson read an inscription of this king found at Takht-i-Bahi, as dated in his twenty-sixth year—one says in the 103rd,¹ the other 100th,² of the same Samvat as the inscription of Kanishka—a date which would answer perfectly for the legend. If this is so, there is an end of the controversy; but the stone is so worn, and the writing so indistinct, that I cannot see in the photographs of it what these gentlemen find there, and others are equally unable to do so; and besides this, it is such a wrench to all numismatic evidence to place the coins of Gondophares 100 years after those of Kanishka, that we must have more evidence than this imperfect inscription affords before we adopt its epochal date. The regnal date seems quite clear.

There is one other point of view from which this question may be regarded, but which it is difficult to express clearly without going to a greater length than our limits will admit of. It is the date of the third convocation, as the northern Buddhists call it—the fourth, according to the southern. It was held certainly under Kanishka's auspices, and I cannot help fancying about the year 70 or 80 A.D. At that time, at least, Buddhism seems to have made a great stride in Thibet, in Burmah, and the East generally. It was about this time that it was fabled to have been first carried to Java, and about the time when it was first introduced in China.³ It looks so like one of those outbursts of missionary zeal that followed all the three previous convocations, that I cannot help fancying that this one was held in the latter half of the first century, and that the era of the king who held it was allowed in all Buddhist countries to supersede that of the Nirvana, which, as far as I can see, was the only one that had existed previously in India.

To argue this out fully would require more space than its importance for architectural purposes would justify; but its bearing on the age of the Gandhara monasteries is in some respects considerable. If they are as modern as I suspect them to be, the more modern date for Kanishka would accord better with the known facts than carrying his date up before the Christian era.

Proceeding onward, the next name we come to of any importance is Mahiracula, who is said to have invaded Ceylon. There is, how-

¹ 'Archæological Reports,' vol. v. p. clety,' vol. vii. (N.S.) p. 376, *et seqq.*

59.

² Beal's 'Life of Fa Hian,' Introduction,

³ 'Journal of the Royal Asiatic Society,' p. xx.

ever, no trace of any such invasion at that time, which, by the application of averages would be about 180 A.D., if Kanishka ruled before, and 250 if after, the Christian Era. His date would be interesting if it could be ascertained from his connexion with Baladitya, the king of Magadha, whose story Hiouen Thsang tells in such minute detail.¹

The Aditya dynasty opens with a king who is said to have been a kinsman of Vicramaditya, and is evidently the grandfather of the great king of that name, who figures prominently in the next dynasty as the patron of Matrigupta. The story of the latter is told in great detail in the 'Raja Tarangini,' and is one of the most curious episodes in the history. He was sent to Kashmir four years before the death of Vicramaditya (550), and on hearing of his patron's decease, resigned his viceroyalty, and retired to Benares, leaving the throne to his successor, Pravarasena.

In speaking of the dynasty of Malwa, only twenty or twenty-five years were allowed for the reign of Sri Harsha, and only eighty for the whole duration, from the fall of the Guptas, 470, to the death of the great Vicramaditya, 550, a period, it seems from the evidence of the 'Raja Tarangini,' it is impossible to contract. Pratapaditya, the kinsman of the first, was, we are told, the great-grandfather of Megavahana, the first king of the next dynasty, and then we have one more king before we reach Hiranya, who is said to have been contemporary with the second Vicramaditya. Of course there may have been considerable overlapping at both ends, and the lives of the Kashmiri kings may have been short; but as we have six intermediate kings in the one list between the two Vicramadityas, and only one in the other, it seems that the last could hardly have ascended the throne before 515, if so early.

One of the acts of Pravarasena was to invade Siladitya, the first Ballabhi king of that name ruling in Gujerat. We have not, it is true, any dated coins or inscriptions belonging to him, but we have of his next successor but one, Sri Dharasena II., 593 (*ante*, p. 730), so that any date between 550 and 570 would answer perfectly well for this war, and the fact of its being so is in itself almost sufficient to establish the correctness of the chronology we are now trying to explain.

Since I wrote last on the subject, a passage has been pointed out to me² in Rémusat's 'Nouveaux Mélanges Asiatiques' (vol. i. p. 197), which enables us to fix the chronology of the Naga dynasty within a year or two for extreme deviation. It seems that the third king, Chandrapira, applied to the Chinese Emperor for assistance against the Arabs in

¹ 'Relations des Contrées,' &c., vol. i. p. 190, *et seqq.* | ² I am indebted for this to Cunningham's 'Geography of India,' p. 61.

713, and that the Emperor conferred the title of King on him in or about 720. As he was on the throne only eight years and eight months, there is no room for deviation in this date, and it carries with it those of his predecessors and followers. It thus becomes clear that Durlabha I. was the king who was on the throne when Hiouen Tshang resided in the valley, 631-633, and also when he passed near it on his return home in 643, all which is perfectly consonant with what we find in his text; and it also fixes the date of Lalitaditya, one of the most important kings in the list, with almost absolute certainty, as 725-762.

Without placing implicit reliance on all that is said in the 'Raja Tarangini,' with regard to the exploits of this king, or of his having overrun and conquered all India, from beyond the Himalayas to Cape Comorin, still a sufficient residuum of fact must remain to enable us to see that the troubles which had begun in 650, on the death of Siladitya of Canouge, had laid India prostrate at the feet of any daring adventurer.

From whatever side we approach it, we can hardly fail to perceive that a great revolution took place in India about the year 750. All the old dynasties are then swept away, and for 200 years we have nothing but darkness, and when light again dawns, about two centuries afterwards, the map is re-arranged, and new dynasties and new religions have taken the place of the old.

This reign, too, forms a most appropriate termination to the principal division of our architectural history. The coins of his rival, Yasoverman of Canouge, found in the great Tope at Manikyala, prove the completion of that great Buddhist monument, just 1000 years after the style had been inaugurated by the great Asoka, and in that thousand years all that is important in Buddhist architecture is included. The fact, too, of his being the builder of the great Naga temple at Martand, the earliest, so far as I know, in Kashmir, marks the commencement of a new architectural era, the fruits of which we see when the curtain again rises. The Jaina religion, with its new style of temples, had entirely replaced Buddhist forms over the greater part of India, and the Vaishnava and Saiva religions reigned supreme everywhere else, in the forms in which we now find them, after the lapse of nearly another 1000 years' duration. As, however, there are no chronological difficulties with regard to these later dynasties, the discussion of the dates of the kings' reigns who built them has evidently no place in this Appendix.²

¹ Cunningham's 'Ancient Geography of India,' p. 92.

² One of the most useful manuals ever published for the use of students of Indian history and chronology was Prin-

sep's 'Useful Tables of Indian Dynasties, &c.' They were republished by Mr. Thomas in his edition of 'Prinsep,' with considerable additions and many improvements by himself, but the edition

ERA OF VICRAMADITYA.

Before concluding this Appendix, I would like to be allowed to explain an hypothesis which, if it can be sustained, not only clears up what has hitherto been a great mystery, but gets rid of a quantity of rubbish which obscures the chronology of the period. It does not, however, alter any date, nor affect them further than, if true, it confirms some, which, if it prove groundless, are deprived of its support.

No one has yet been able to point to the name of Vicramaditya as belonging to any king in the first century B.C., or to any event likely to give rise to an era being dated from it.¹ What, then, was the origin of the era dating from 56 B.C., and how did it arise and obtain its name?

My belief is that the solution of the mystery will be found in a passage in Albiruni, the meaning of which he did not profess to understand, combined with two or three passages in the 'Raja Tarangini.'

The passage in Albiruni is to the following effect:—"L'ère de Saca, nommée par les Indiens Sacakala, est postérieure à celle de Vicramaditya de 135 ans. Saca est le nom d'un prince qui a régné sur les contrées situées entre l'Indus et la mer (le Golfe du Bengale). Sa résidence était placée au centre de l'Empire (Muttra?), dans la contrée nommée Aryavatha. Les Indiens le font naître dans une classe autre que celle des (Kchatrias?): quelques-uns prétendent qu'il était Soudra et originaire de la ville de Mansoura. Il y en a même qui disent qu'il n'était pas de race indienne, et qu'il tirait son origine des régions occidentales. Les peuples eurent beaucoup à souffrir de son despotisme, jusqu'à ce qu'il leur vint du secours de l'Orient. Vicramaditya marcha contre lui, mit son armée en déroute, et le tua sur le territoire de Korour, situé entre Moultan et le Château de Louny. Cette époque devint célèbre, à cause de la joie que les peuples ressentirent de la mort de Saca, et on la choisit pour ère, principalement chez les astronomes."²

It seems impossible to apply this narrative to any events happening in the first century B.C., not to mention the inherent absurdity of Vicramaditya establishing an era 56 B.C., and then 135 years afterwards defeating the Saka king on the banks of the Indus. If it meant anything, it might point to the origin of the Saka era, not that of Vicramaditya.

is exhausted. There could hardly be any better service done for the cause, than if he or some one would republish them in a separate form, so as to render them generally available. It is a pity Government has no funds available for

such a purpose, for I am afraid it would hardly pay as a bookseller's speculation.

¹ 'Journal of the Royal Asiatic Society,' vol. iv. (N.S.) p. 181, *et seqq.*

² 'Journal Asiatique,' 4me série, tom. iv. p. 282.

Turning from this to the 'Raja Tarangini,' we find the following passages in Troyer's translation :—

"Ayant fait venir ensuite, d'un autre pays, Pratapaditya, parent du roi Vicramaditya, ils le sacrèrent souverain de l'Empire.

"D'autres induits en erreur ont écrit que ce Vicramaditya fut le même qui combattit les Çakas ; mais cette version est rejetée."¹

A little further on we have : "Dans le même temps—the death of Hiranya—l'heureux Vicramaditya, appelé d'un autre nom Harcha, réunit comme empereur à Udjdjayini l'Empire de l'Inde sous un seul parasol. . . .

"Employant la fortune comme moyen d'utilité, il fit fleurir les talents : c'est ainsi qu'encore aujourd'hui les hommes de talent se trouvent la tête haute au milieu des riches.

"Ayant d'abord détruit les Çakas, il rendit léger le fardeau de l'œuvre de Hari, qui doit descendre sur la terre pour exterminer les Mletchhas."²

Before going further, it may be as well to point out what appears to be a fair inference from the above. That the first Vicramaditya, the friend of Pratapaditya, was so near in date to the second—he, in fact, appears to have been his grandfather—as to be confounded with him, and to have the name of Sakari applied to him, which in fact belonged to his grandson, the real destroyer of the Sakas.

My conviction is, that these paragraphs refer to one and the same event ; and, assuming that the battle of Korûr was fought 544—the year before Vicramaditya sent Matrigupta to be his viceroy in Kashmir—what I believe happened was this : Some time after 750, when the Hindus were remodelling their history and their institutions, so as to mark their victory over the Buddhists, they determined on establishing two eras, which should be older than that of the Buddhists, A.D. 79, and for this purpose instituted one, ten cycles of sixty years each, before the battle of Korûr, and called it by the name of the hero of that battle, the most illustrious of their history ; the other ten centuries, or 1000 years before the same date, and called it by the name of his father, Sri Harsha—a title he himself often bore in conjunction with his own name—the first consequently dated for 56 B.C., the second from 456. It need hardly be added that no Sri Harsha existed in the fifth century B.C., any more than a Vicramaditya in the first.

The co-existence of these eras may be gathered from the following passage in Albiruni :—

¹ Troyer's translation of the 'Raja Tarangini,' vol. ii. p. 43. In Wilson's translation it is said, "A different monarch from the Saccari Vicramaditya, though sometimes erroneously identified with that prince."—'Asiatic Researches,' vol. xv. p. 32.

² Loc. cit. p. 76.

“On emploie ordinairement les ères de Sri Harscha, de Vicramaditya, de Saca, de Ballabha, et des Gouptas.” “D’après cela, en s’en tenant à l’an 400 de l’ère de Yezderdjed, on se trouve sous l’année 1488 de l’ère de Sri Harscha—l’an 1088 de l’ère de Vicramaditya—l’an 958 de l’ère de Saca—l’an 712 de l’ère de Ballabha, et de celle des Gouptas (A.D. 1032).”—‘Journal Asiatique,’ series iv. vol. iv. pp. 280, 286.

The Sri Harsha era, exactly 400 years before that of Vicramaditya, was avowedly conventional, and seems never to have come into use, and no further mention is made of it afterwards.

If this view of the matter can be sustained, the advantage will be not only that the date of the battle of Korûr, and of the expulsion of the Sakas, Hunas, Yavanas, &c., from India will be fixed with mathematical precision in 544, but that one of the greatest mysteries connected with the history of the period will be cleared up, and the revival of the Hindu religion relegated to a much later period. If, on the other hand, it can be shown that this view of the matter is not tenable, we shall lose these advantages, but it will require a great deal more than that to prove that Vicramaditya, or any Hindu king, reigned in the first century B.C. Buddhism was then in its palmyest state, and there is no trace of the Hindu religion then existing, and the expulsion of Sakas, Yavanas, and Hunas did not take place for long afterwards.

Be this as it may, having now cursorily run through the whole chronology, in so far as it admits of controversy, I feel very confident, on a calm review of the whole, that none of the important dates quoted above can be disturbed to a greater extent than say ten, or at the utmost twenty years—except, perhaps, that of Kanishka. From the Anjana epoch, 691 B.C., to the death of Lalitaditya, A.D. 761, all seems now tolerably clear and fixed, and, with a very little industry, minor blemishes might easily be swept away. If this were done, the chronology of mediæval India for the Buddhist period might be considered as fixed on a secure and immoveable basis of ascertained facts. The advantages of this being done can hardly be over-estimated for improving our knowledge of India generally, while, among other things, it would give a precision and solidity to all our speculations about that country, which, for want of it, have hitherto been generally so vague and unsatisfactory.

APPENDIX B.

THE following are the last of the twenty-four Buddhas, beginning with Dipankara I., who appeared to instruct and enlighten mankind, and to whom Sakya Muni succeeds in the present Kalpa :

22. Kakusanda, born at Khémawatinagara. His Bo-tree the Sirisia (*Sirisa accasia*).
 23. Kanamma, born at Sobhawatinagara. His Bo-tree the Udambara (*Ficus glomerata*).
 24. Kassapa born at Baranasi-nagara, Benares. His Bo-tree the Nigrodha (*Ficus Indica*).
 Gautama, born 623 B.C., at Kapilawasta. His Bo-tree Pippala (*Ficus*

APPENDIX C.

THE TWENTY-FOUR TIRTHANKARAS OF THE JAINS.

	NAME.	DISTINCTIVE SIGN.	BORN.	DIED.
1	Adinatha or Vri- shabha . . .	Bull	Ayodhya . .	Gujerat
2	Ajitnatha . . .	Elephant	"	Mt. Sikhar, Chodri
3	Sambhunatha . .	Horse	Sawanta . .	" Parisnath
4	Abhinandanatha	Monkey	Ayodhya . .	"
5	Sumatinatha . .	Chakwa (Red Goose)	"	"
*6	Supadmanatha .	Lotus	Kausambhi .	"
7	Suparswanatha .	Swastika	Benares . .	"
8	Chandraprabha .	Crescent Moon . . .	Chandripur .	"
9	Pushpadanta . .	Crocodile	Kakendrapur	"
10	Sitalanatha . . .	Tree or Flower . . .	Bhadalpur .	"
11	Sri Ansanatha . .	Rhinoceros	Sindh	"
12	Vasupadya . . .	Buffalo	Champapuri .	Champapuri
13	Vimalanatha . . .	Boar	Kumtapapuri	Mt. Sikhar
14	Anantanatha . . .	Porcupine	Ayodhya . .	"
15	Dharmmanatha .	Thunderbolt	Ratanpuri . .	"
16	Santanatha . . .	Antelope	Hastinapura .	"
17	Kunthanatha . . .	Goat	"	"
18	Aranatha	Fish	"	"
19	Mallinatha . . .	Pinnacle	Mithila . . .	"
20	Munisuvrata . . .	Tortoise	Rajgraha . .	"
21	Naminatha . . .	Lotus, with stalk . .	Mithila . . .	"
22	Neminatha . . .	Shell	Dwarika . . .	Mt. Girnara
23	Parwanatha . . .	Snake	Benares . . .	Mt. Sikhar
24	Vardhamana or Mahavira	Lion	Chitrakot . .	Pawapuri

¹ From Introduction to Turnour's places of birth, and Bo-trees of the whole 'Mahawanso,' p. xxxiii., where the names, twenty-four are given.

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